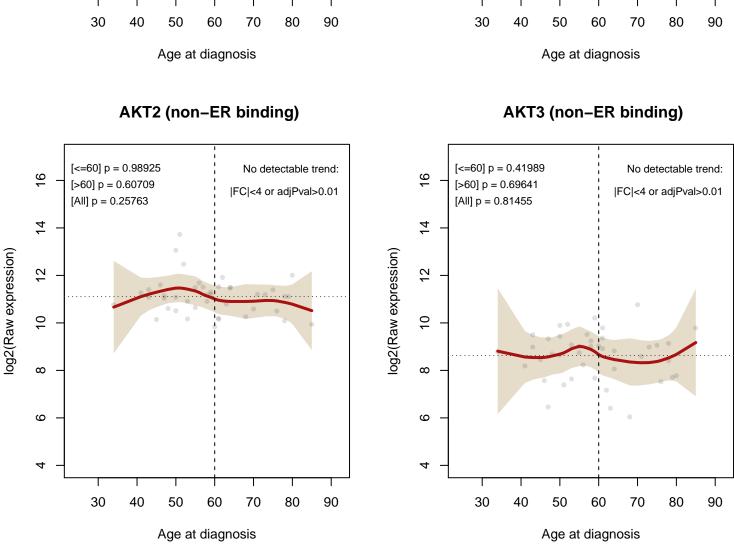
#### **AEBP2 (non-ER binding) AKT1 (ER binding)** [<=60] p = 0.2458No detectable trend: [<=60] p = 0.659916 16 [>60] p = 0.011364 [>60] p = 0.76996 |FC|<4 or adjPval>0.01 [All] p = 0.28801[All] p = 0.0346834 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 Age at diagnosis **AKT2 (non-ER binding)** [<=60] p = 0.98925No detectable trend: [<=60] p = 0.41989

No detectable trend:

|FC|<4 or adjPval>0.01

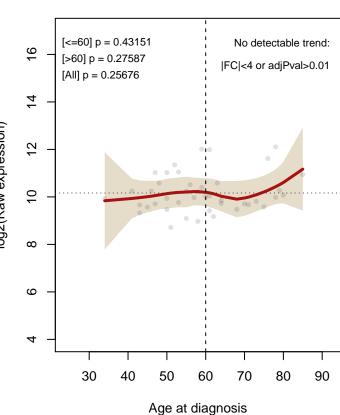


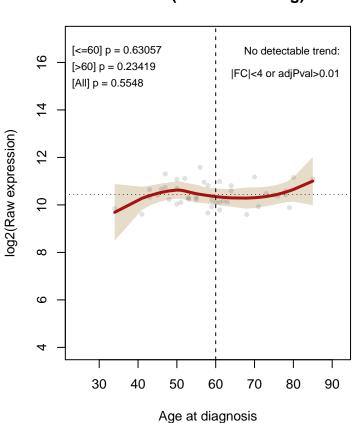
#### APC (non-ER binding) AR (ER binding) [<=60] p = 0.72482No detectable trend: [<=60] p = 0.77288No detectable trend: 16 16 [>60] p = 0.0094686 [>60] p = 0.75389|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.99078[All] p = 0.298994 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 50 60 70 80 90 Age at diagnosis Age at diagnosis ARID1A (non-ER binding) **ARID1B (ER binding)** [<=60] p = 0.50255No detectable trend: [<=60] p = 0.22415No detectable trend: 16 16 [>60] p = 0.078489 [>60] p = 0.76567|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.86461[All] p = 0.417874 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

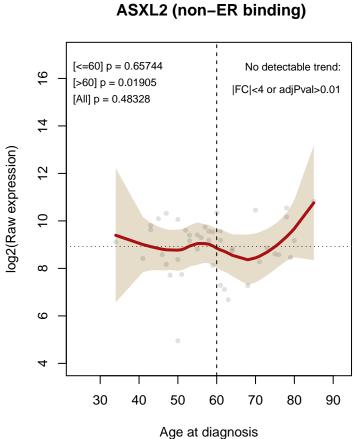
Age at diagnosis

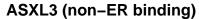
Age at diagnosis

#### **ARNT (ER binding)** ASH2L (non-ER binding) [<=60] p = 0.67496No detectable trend: [<=60] p = 0.4315116 16 [>60] p = 0.28836 [>60] p = 0.27587 |FC|<4 or adjPval>0.01 [All] p = 0.46379[All] p = 0.256764 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω 9 9 30 40 50 60 70 80 90 30 40 Age at diagnosis **ASXL1** (non-ER binding) [<=60] p = 0.63057No detectable trend: [<=60] p = 0.6574416 16 [>60] p = 0.23419 [>60] p = 0.01905|FC|<4 or adjPval>0.01 [AII] p = 0.5548

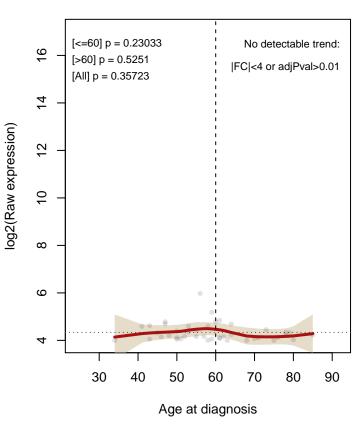


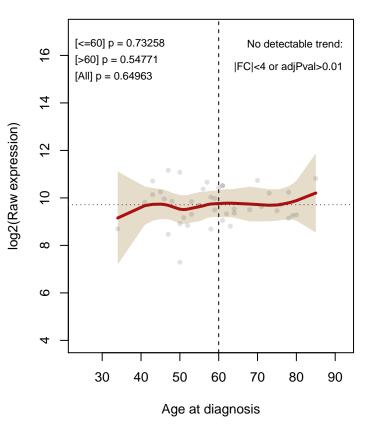






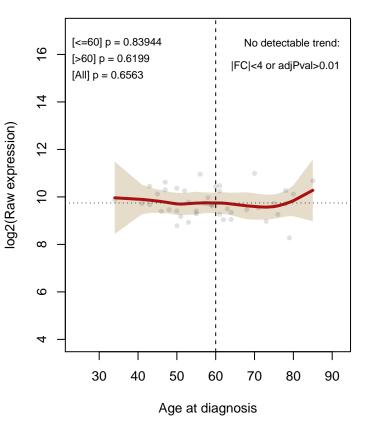
### ATM (non-ER binding)

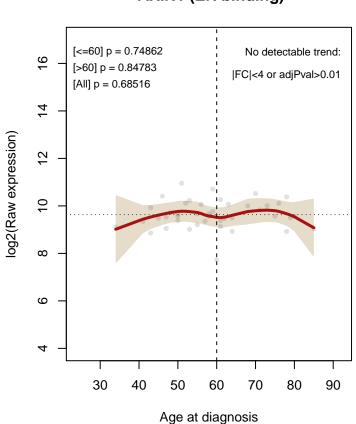




### ATR (non-ER binding)

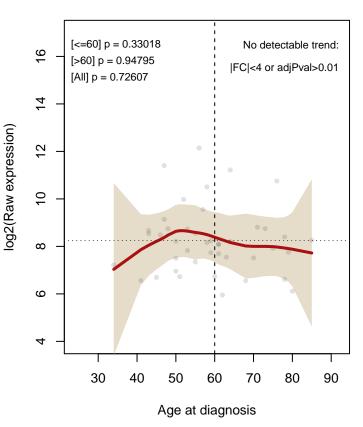
### **AXIN1 (ER binding)**

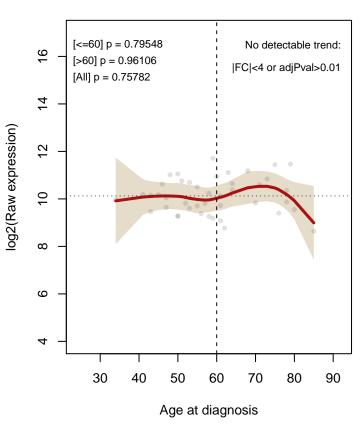




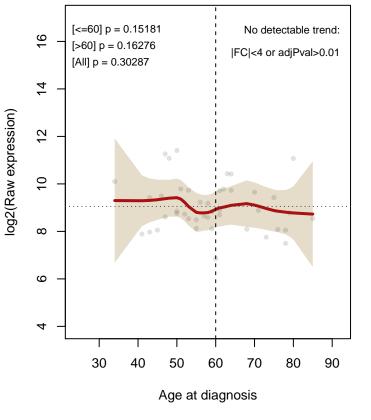


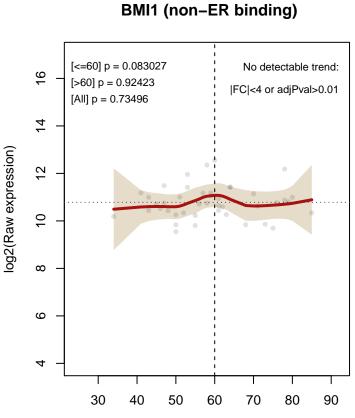
### **BCL3 (non-ER binding)**





BIRC5 (non-ER binding)

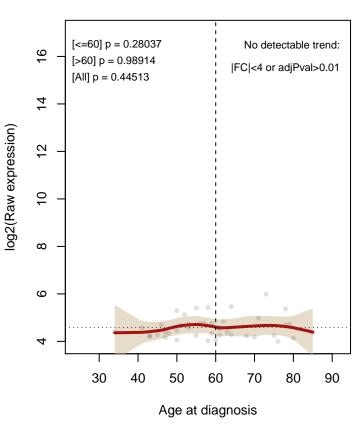


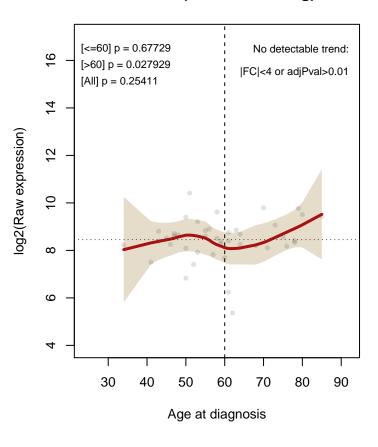


Age at diagnosis



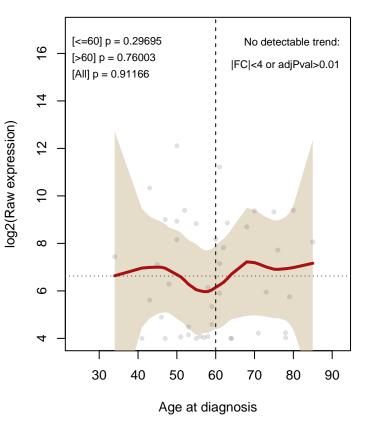
#### BRCA1 (non-ER binding)

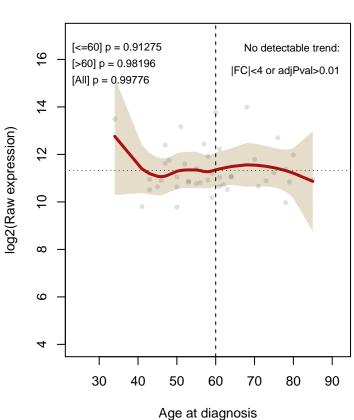


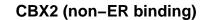


### CA9 (non-ER binding)

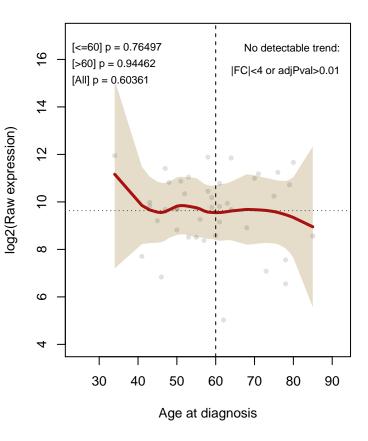
**CBX1** (non-ER binding)

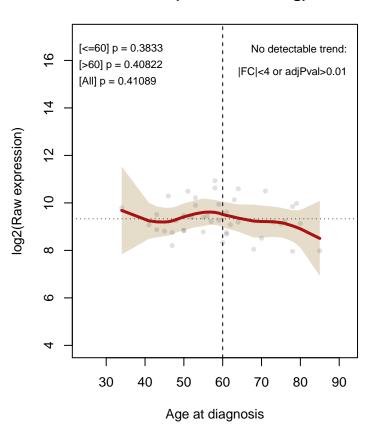






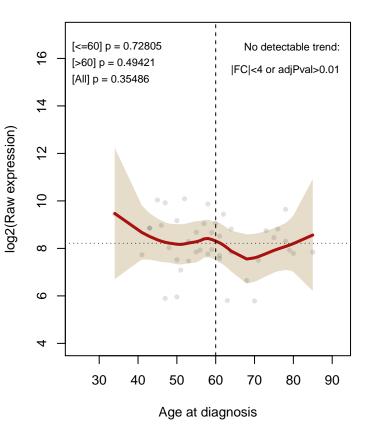
#### CBX4 (non-ER binding)

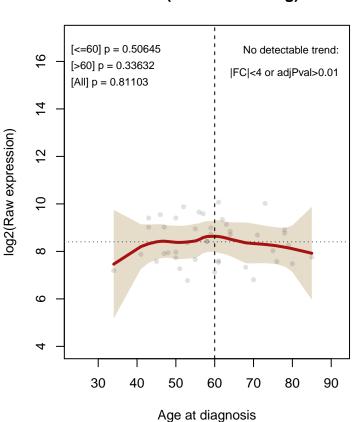




### **CBX6 (non-ER binding)**

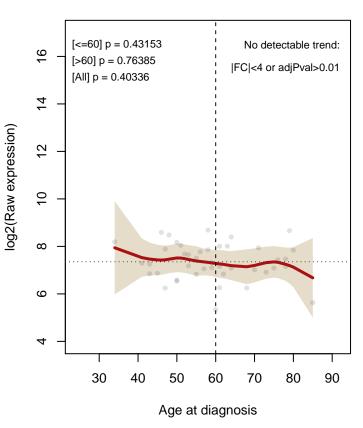
**CBX7 (non-ER binding)** 

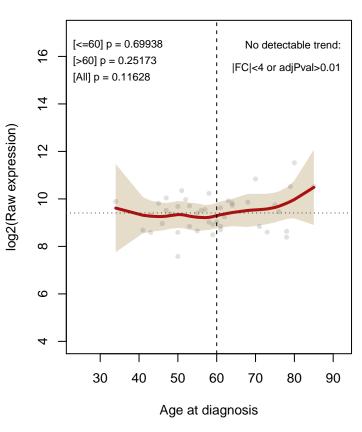




#### CBX8 (non-ER binding)

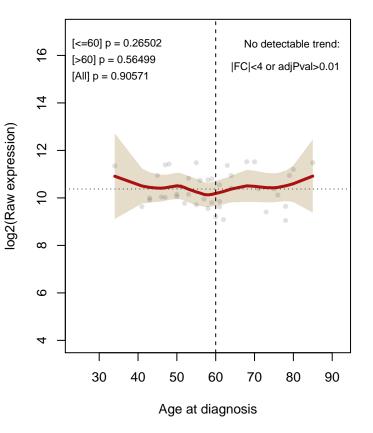
### CCNA2 (non-ER binding)

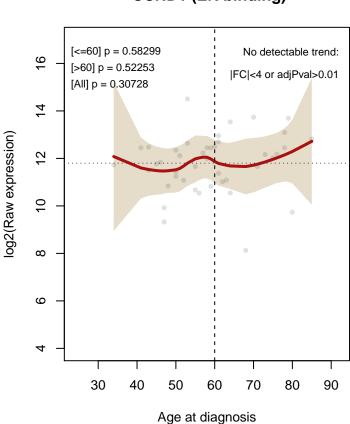




#### **CCNB1** (non-ER binding)

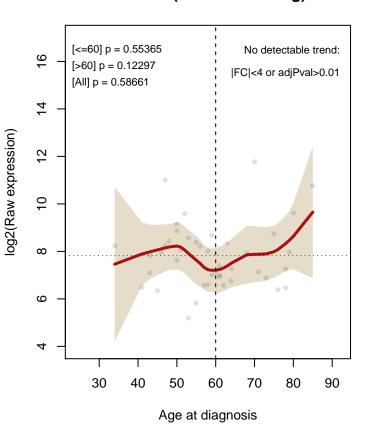
### **CCND1 (ER binding)**

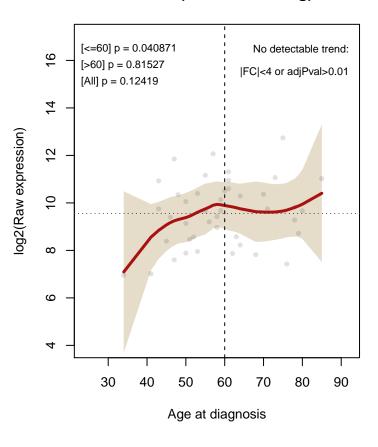




#### **CCNE1** (non-ER binding)

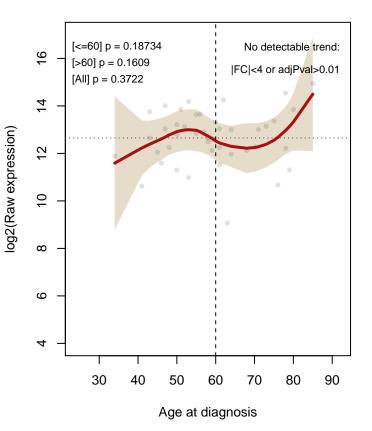
#### CD163 (non-ER binding)

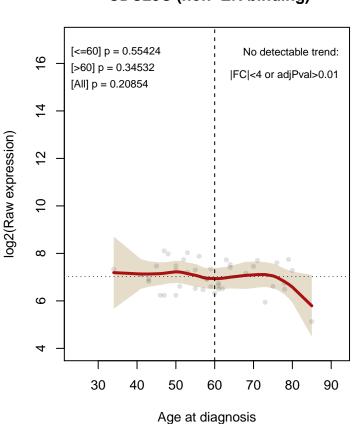




### CD44 (non-ER binding)

CDC25C (non-ER binding)





#### CDH1 (non-ER binding) CDH3 (ER binding) [<=60] p = 0.18408No detectable trend: [<=60] p = 0.37332No detectable trend: 16 16 [>60] p = 0.19701[>60] p = 0.74285 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.45675[All] p = 0.45834 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 CDK1 (non-ER binding) CDK2 (non-ER binding) [<=60] p = 0.64682No detectable trend: [<=60] p = 0.44No detectable trend: 16 16 [>60] p = 0.23978 [>60] p = 0.85158 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.72752[All] p = 0.412384 4 log2(Raw expression) log2(Raw expression) 12 12 19 10 ω ω

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Age at diagnosis

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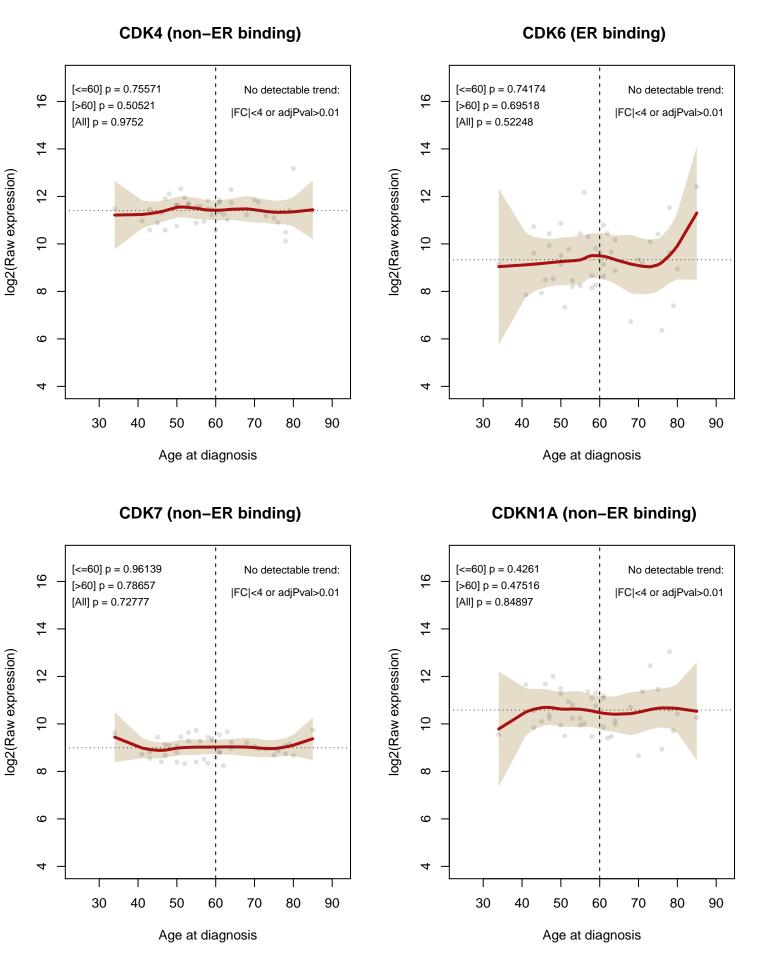
60

Age at diagnosis

70

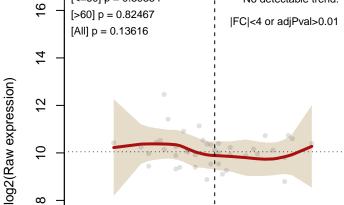
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#### CDKN1B (non-ER binding)

### [<=60] p = 0.39354No detectable trend:



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Age at diagnosis

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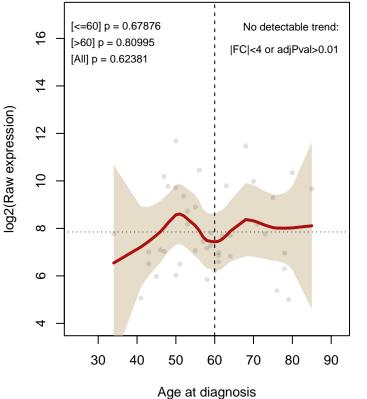
## CDKN2A (non-ER binding)

60

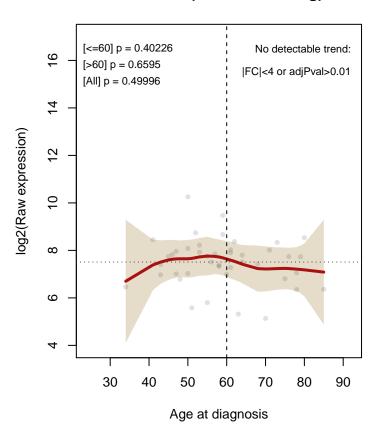
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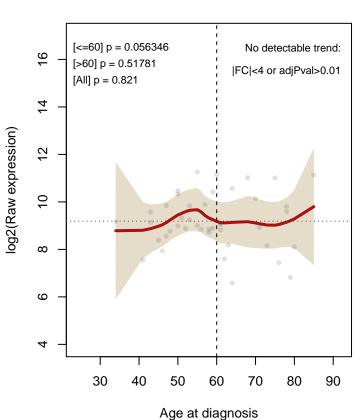
90



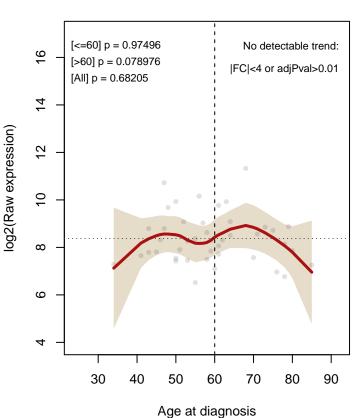
#### CDKN1C (non-ER binding)



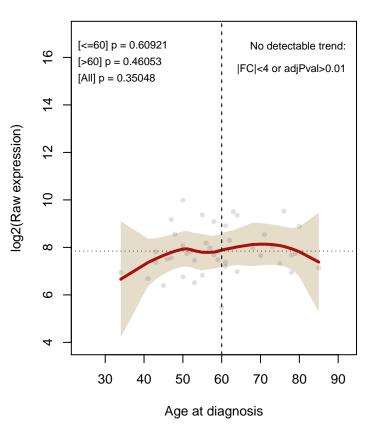
#### CDKN2B (non-ER binding)



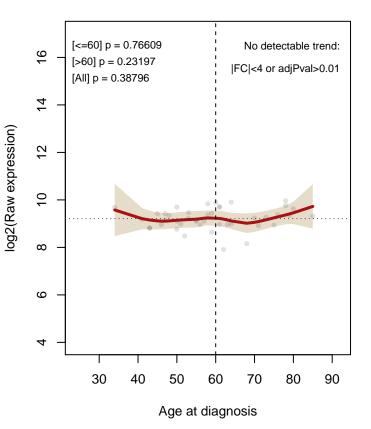
#### CDKN2C (non-ER binding)



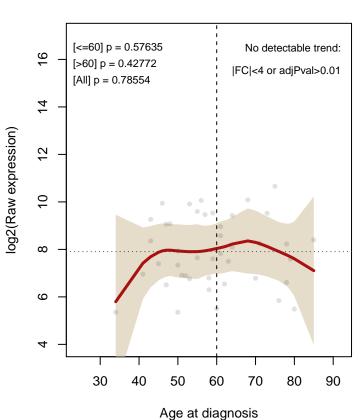
#### CDKN2D (non-ER binding)



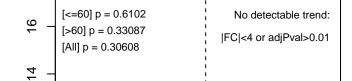
### CHUK (non-ER binding)

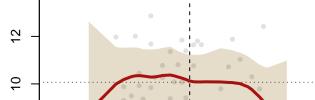


#### CIITA (non-ER binding)



#### CLDN3 (non-ER binding)

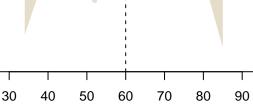




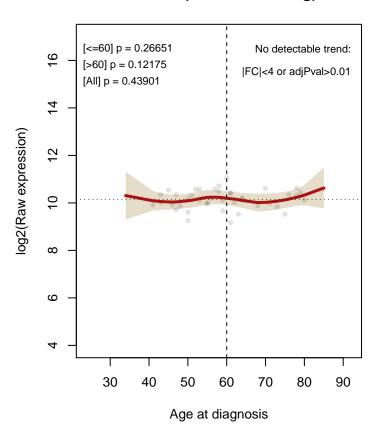
log2(Raw expression)

 $\infty$ 

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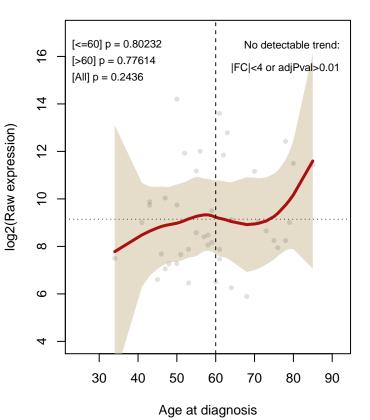


#### CREB1 (non-ER binding)

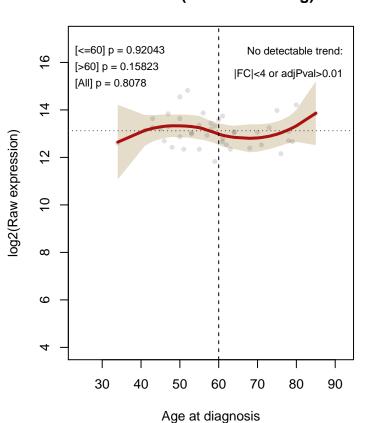


**CRYAB** (non-ER binding)

Age at diagnosis

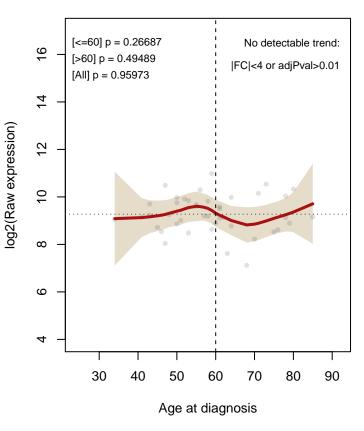


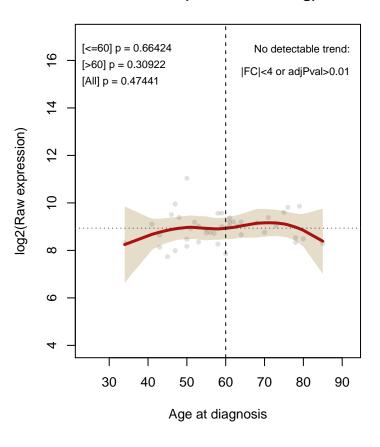
### CTNNB1 (non-ER binding)





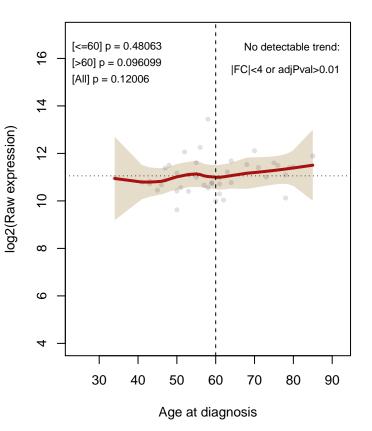
#### **DMAP1** (non-ER binding)

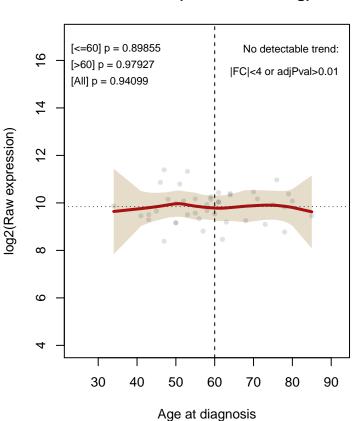




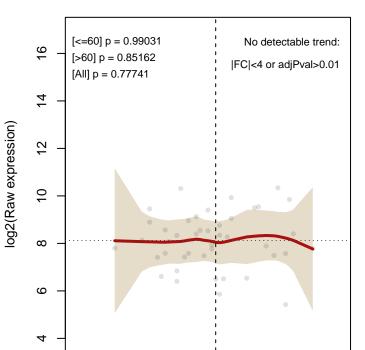
### **DNMT1** (non-ER binding)

#### DNMT3A (non-ER binding)

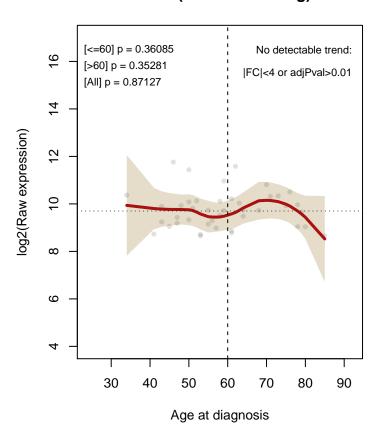






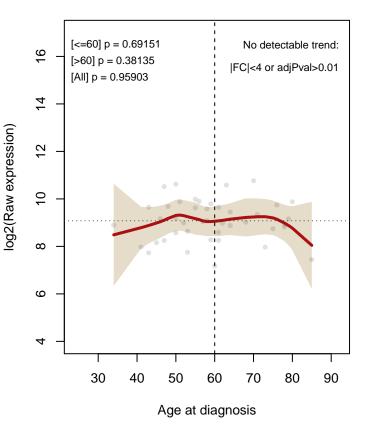


#### **DVL1 (non-ER binding)**

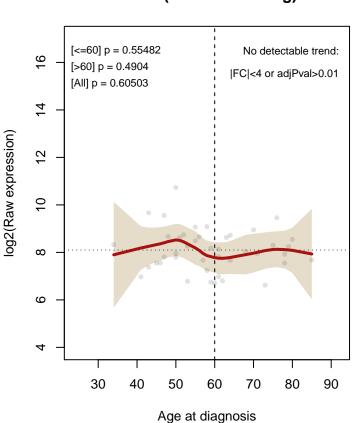


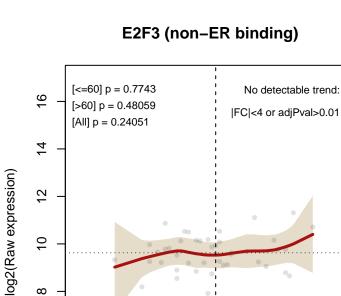
E2F1 (non-ER binding)

Age at diagnosis



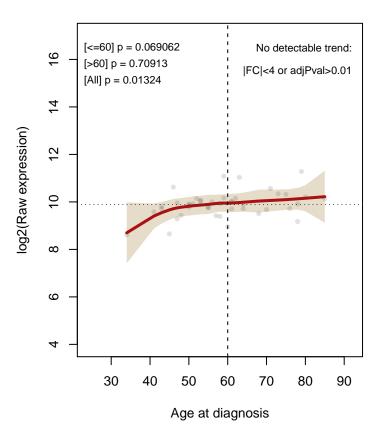
E2F2 (non-ER binding)





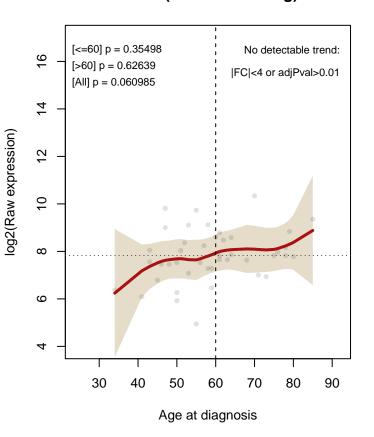
ω

E2F4 (non-ER binding)

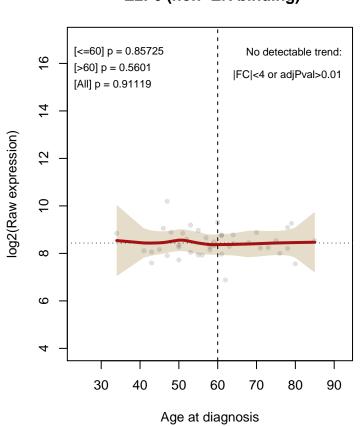


E2F5 (non-ER binding)

Age at diagnosis

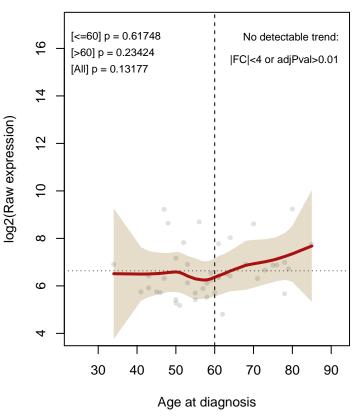


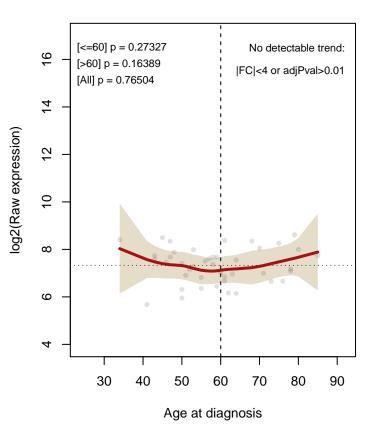
#### E2F6 (non-ER binding)





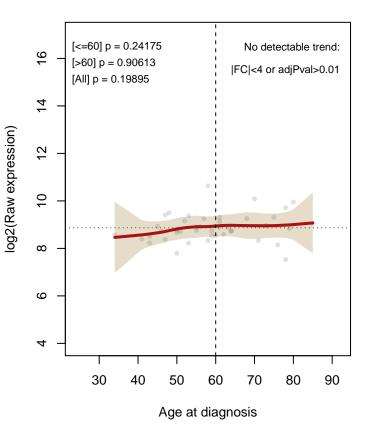
#### E2F8 (non-ER binding)

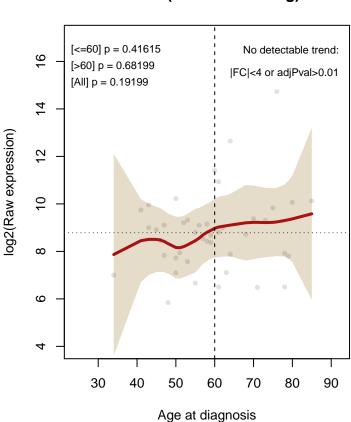


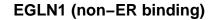


**EED (non-ER binding)** 

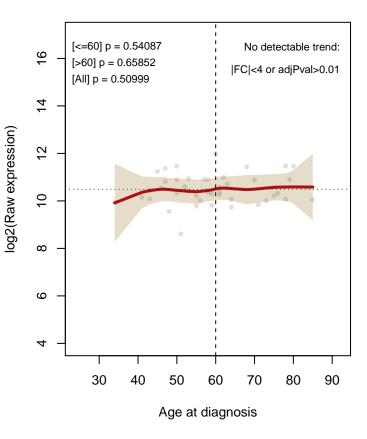
#### EGFR (non-ER binding)

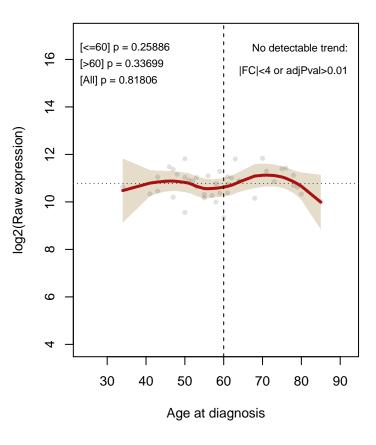






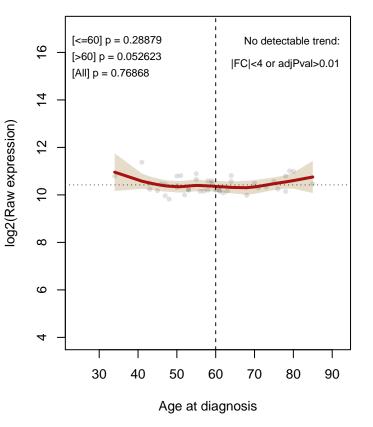
#### EHMT2 (non-ER binding)

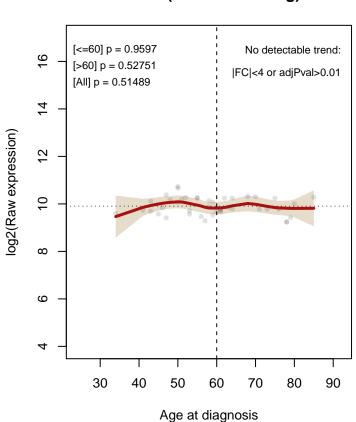


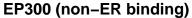


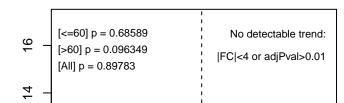
**ELAC2 (non-ER binding)** 

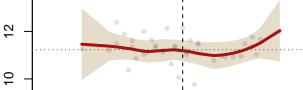
**ELK1 (non-ER binding)** 











log2(Raw expression)



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Age at diagnosis

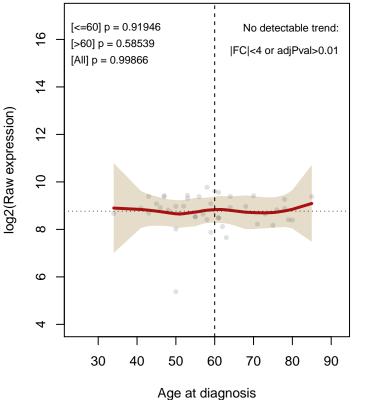
60

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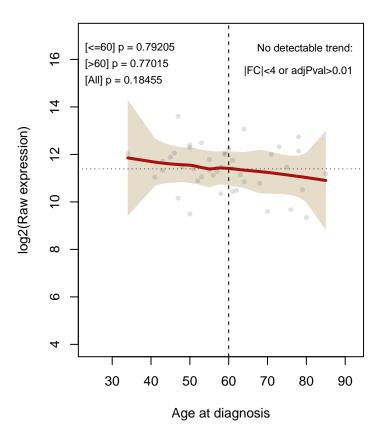
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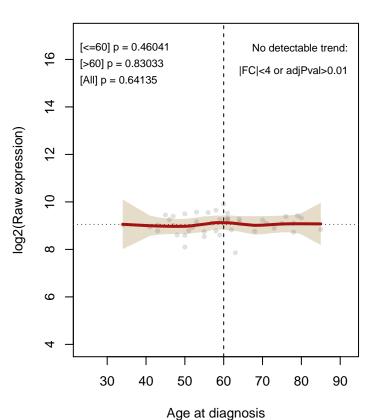
# **EPC1** (non-ER binding)



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

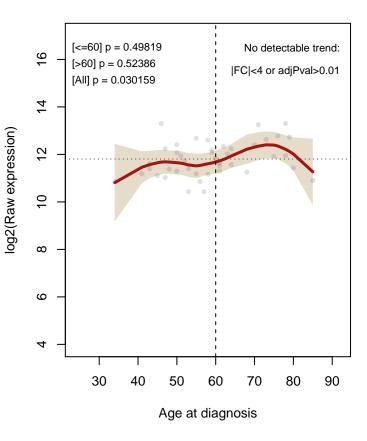


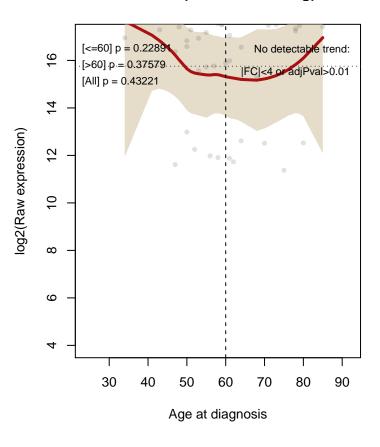
#### **EPC2** (non-ER binding)



#### **EPHB4** (non-ER binding)

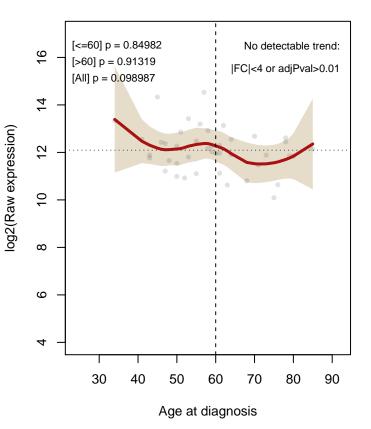
#### ERBB2 (non-ER binding)

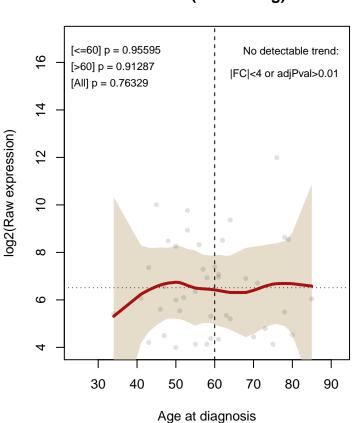


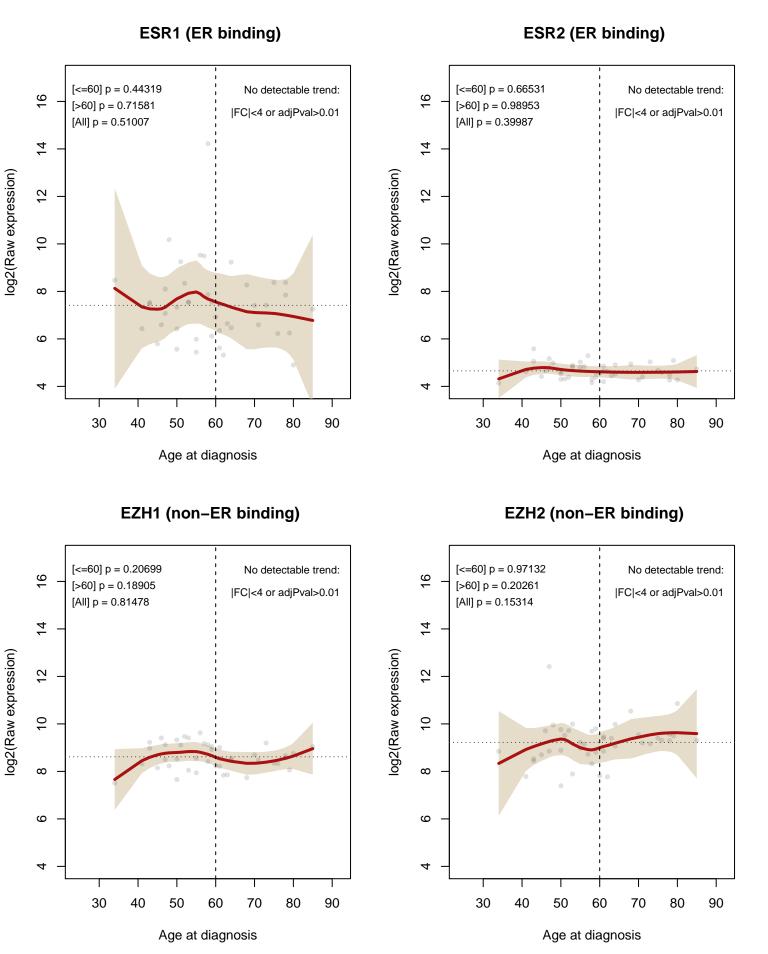


### **ERBB3** (non-ER binding)

**ERBB4 (ER binding)** 







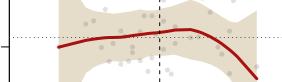






log2(Raw expression)

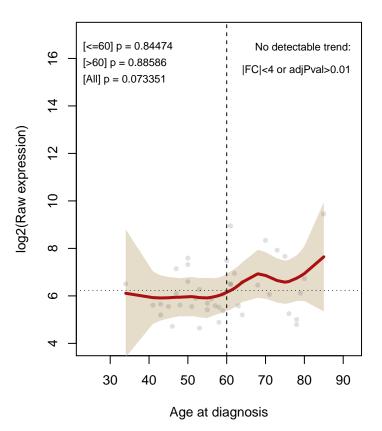




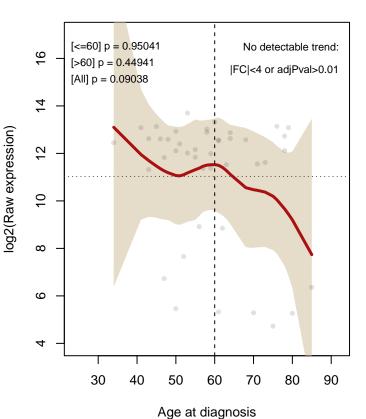
# $\infty$

Age at diagnosis

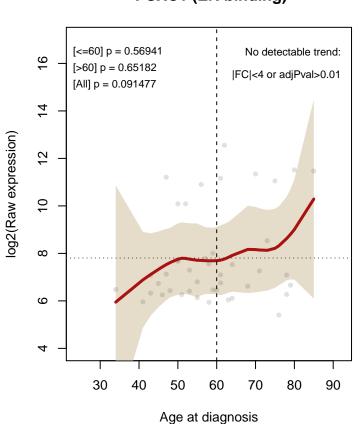
### FOSL1 (non-ER binding)

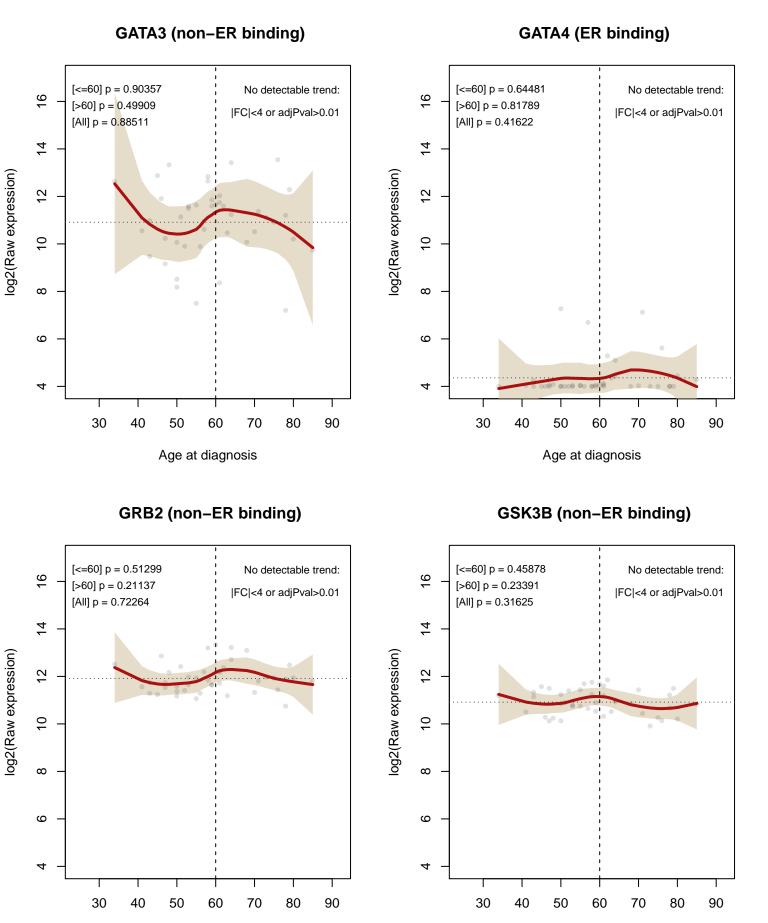


### **FOXA1 (ER binding)**



#### **FOXC1 (ER binding)**



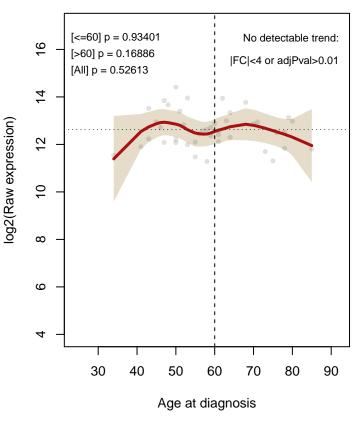


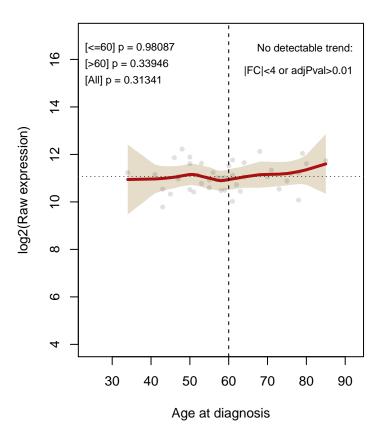
Age at diagnosis

Age at diagnosis



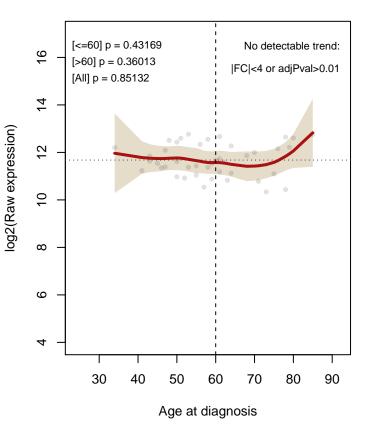
#### **HDAC1 (ER binding)**

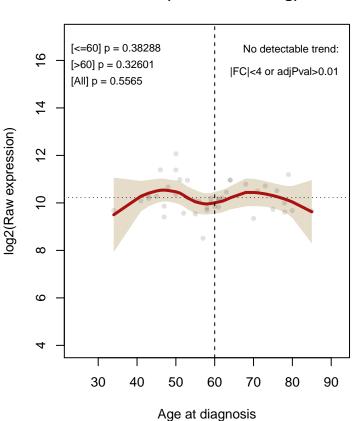




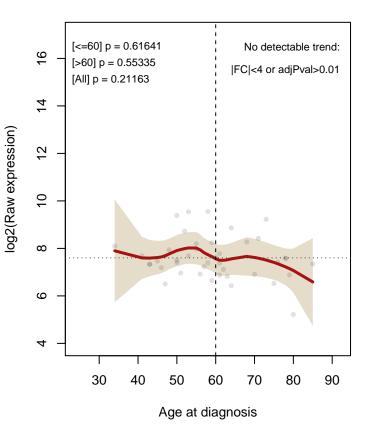
### **HDAC2** (non-ER binding)

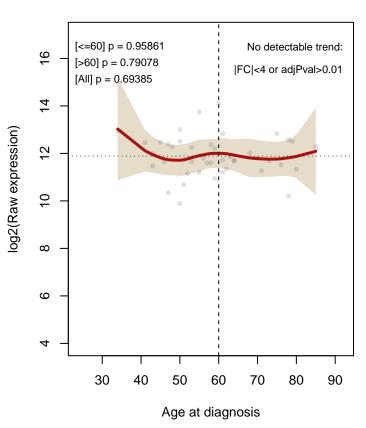
**HES1 (non-ER binding)** 





#### **HEY1 (non-ER binding)**



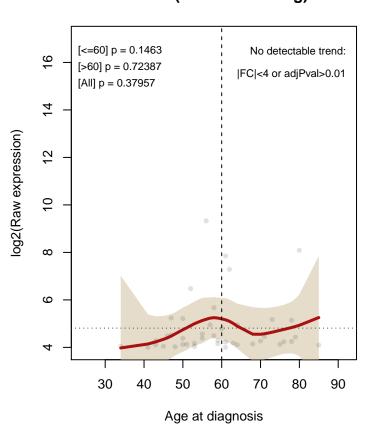


HIF1A (non-ER binding)

#### HIF1AN (non-ER binding)

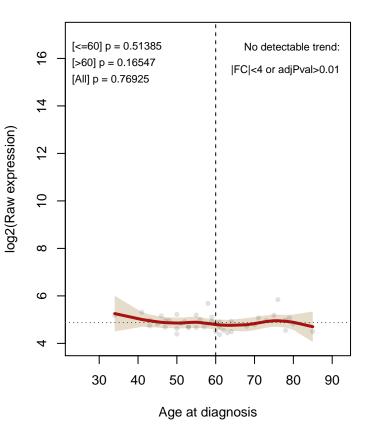
### [<=60] p = 0.96619No detectable trend: 16 [>60] p = 0.12584 |FC|<4 or adjPval>0.01 [All] p = 0.811284 log2(Raw expression) 12 10 ω 9 30 40 50 60 70 80 90 Age at diagnosis

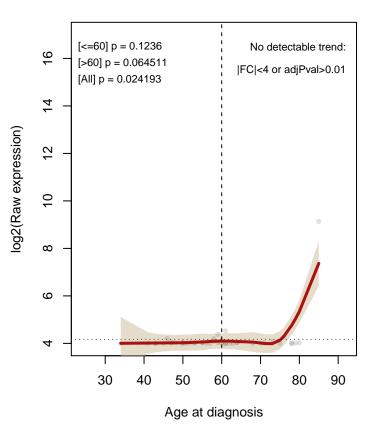
### HIF3A (non-ER binding)



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

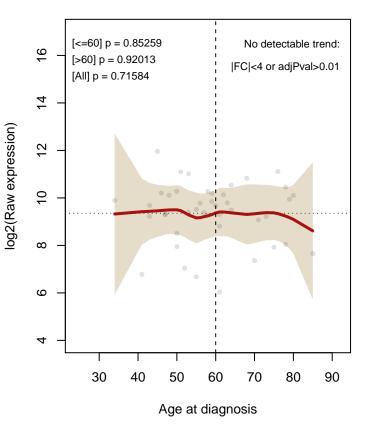
#### inding) HNF1B (non-ER binding)

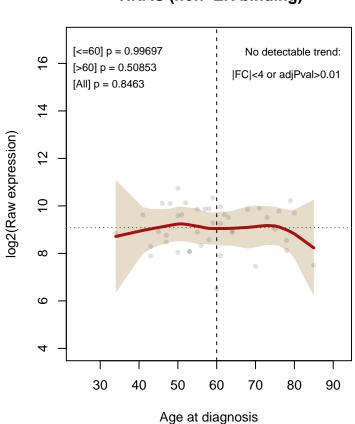




### **HOXC10 (non-ER binding)**

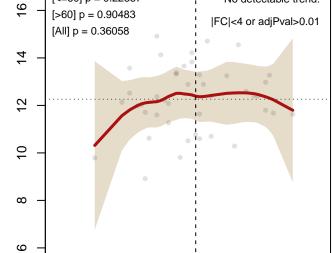
### HRAS (non-ER binding)





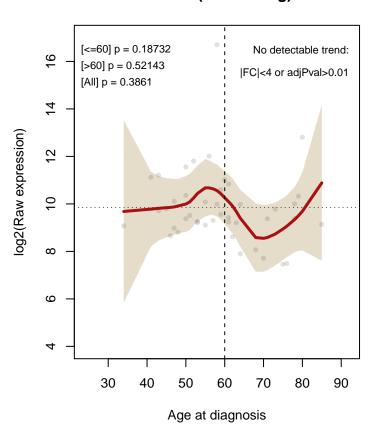


# [<=60] p = 0.22357 No detectable trend:



log2(Raw expression)

#### IGF1R (ER binding)



IGFBP2 (non-ER binding)

Age at diagnosis

60

70

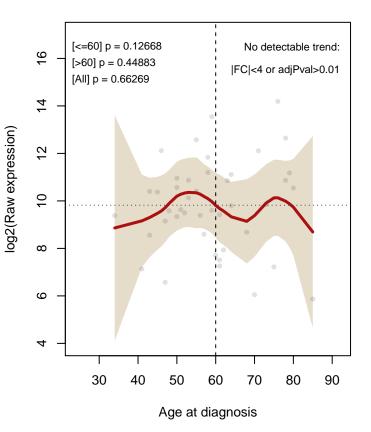
80

90

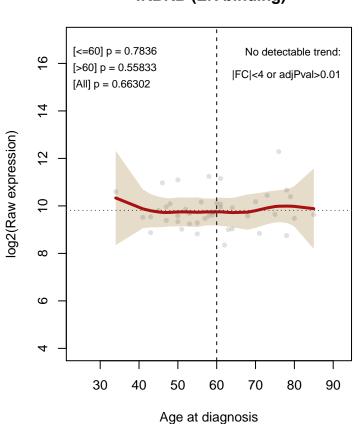
30

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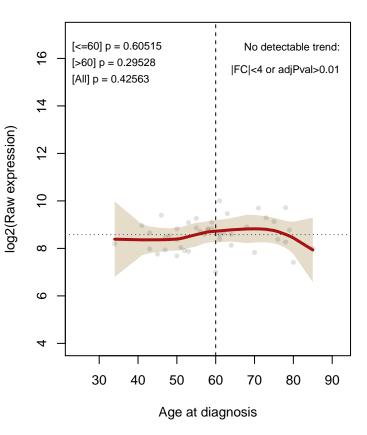


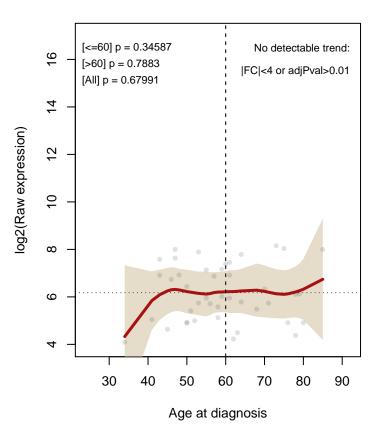
#### IKBKB (ER binding)





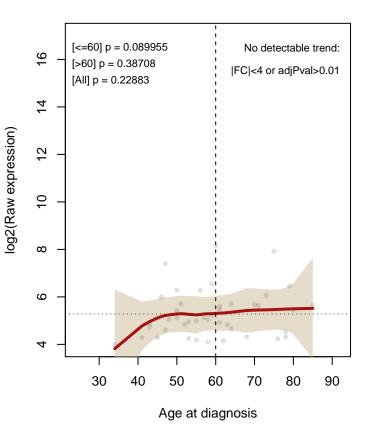
#### IL2RA (non-ER binding)

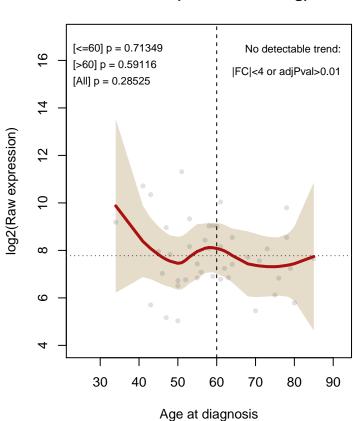


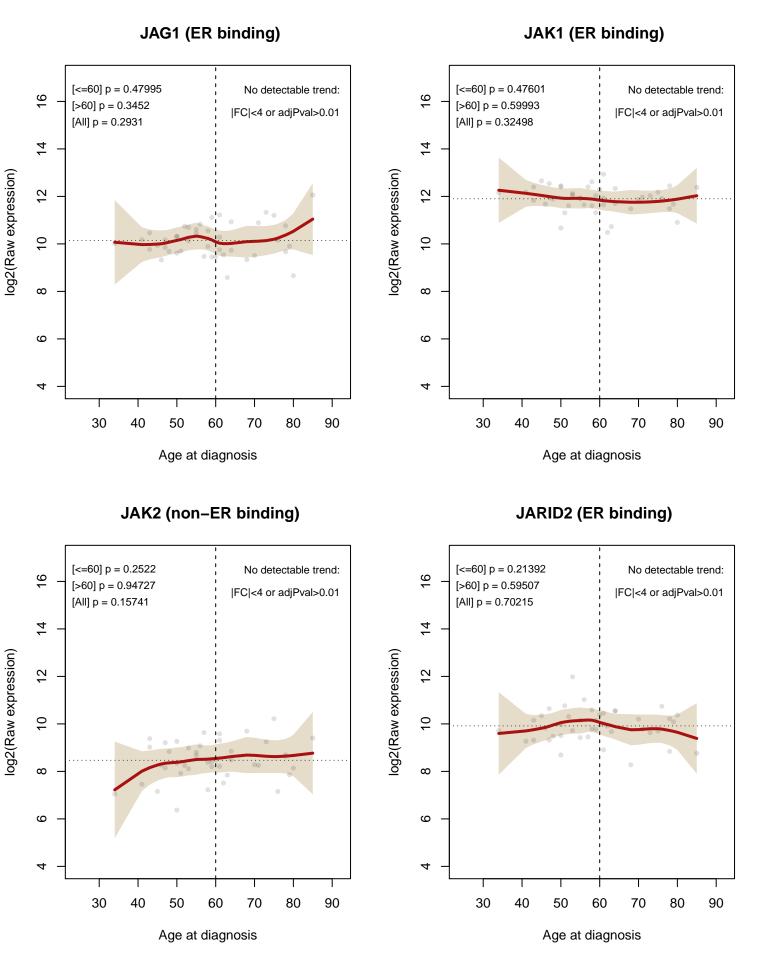


IL6 (non-ER binding)

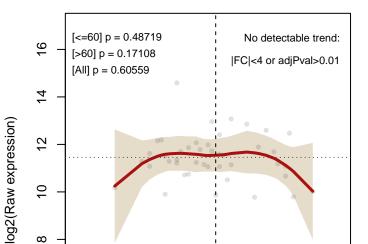
**INPP4B** (non-ER binding)



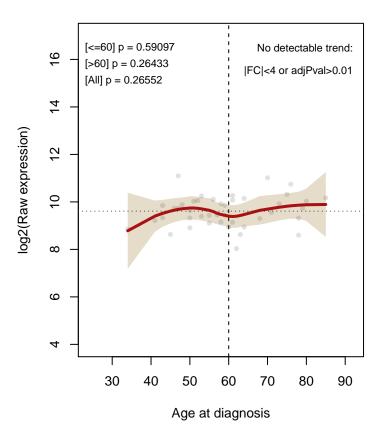




#### JUN (non-ER binding)

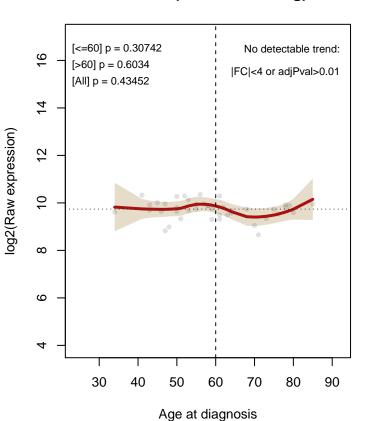


### KDM2B (non-ER binding)

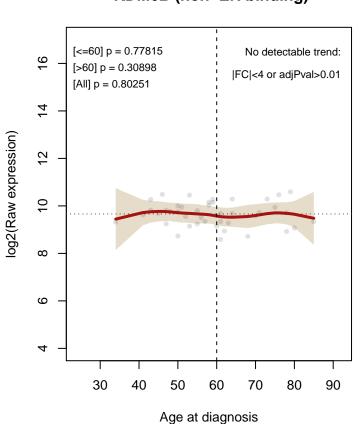


### KDM6A (non-ER binding)

Age at diagnosis



#### KDM6B (non-ER binding)



#### KIAA0101 (non-ER binding)

[<=60] p = 0.82587

[>60] p = 0.52625

[All] p = 0.36127

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Age at diagnosis

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12

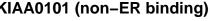
10

 $\infty$ 

9

log2(Raw expression)

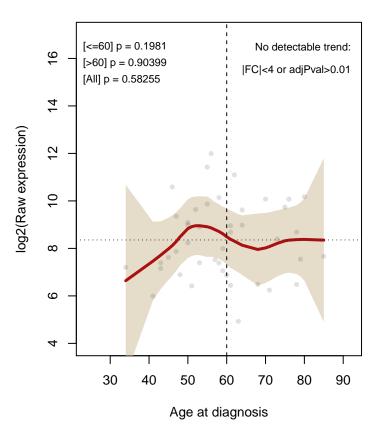
log2(Raw expression)



No detectable trend:

|FC|<4 or adjPval>0.01

#### KIT (non-ER binding)



### KMT2C (non-ER binding)

Age at diagnosis

60

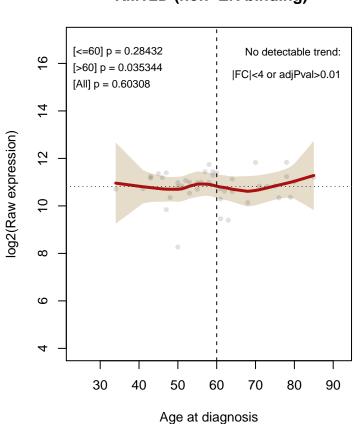
70

80

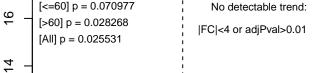
90

## [<=60] p = 0.51748No detectable trend: 16 [>60] p = 0.023258 |FC|<4 or adjPval>0.01 [All] p = 0.214084 12 19 ω 9

#### KMT2D (non-ER binding)



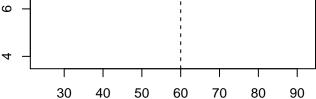
#### KRAS (non-ER binding)





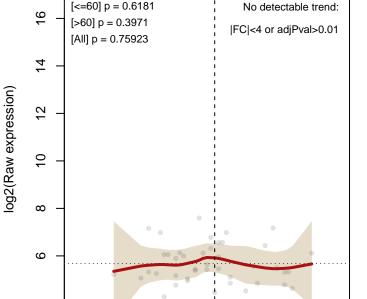
log2(Raw expression)

ω



Age at diagnosis

L3MBTL1 (non-ER binding)



30

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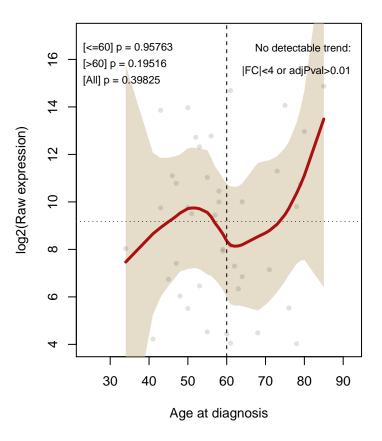
Age at diagnosis

70

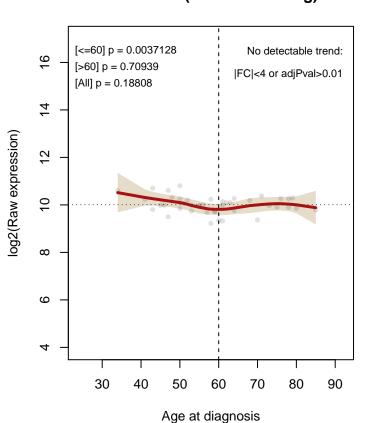
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#### KRT5 (non-ER binding)

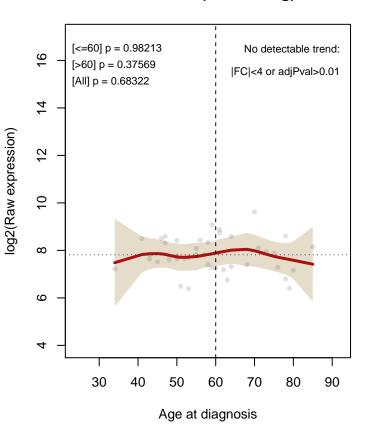


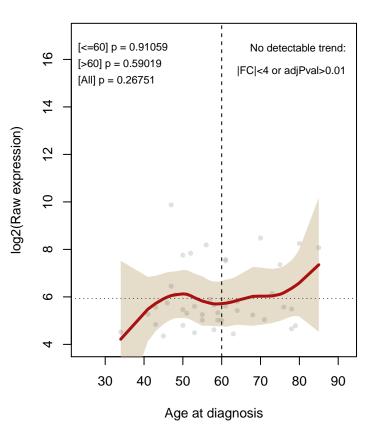
### L3MBTL2 (non-ER binding)



#### L3MBTL3 (ER binding)

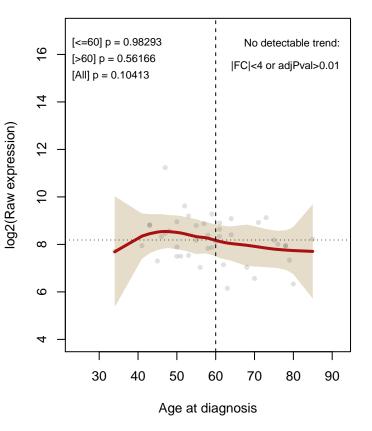
#### L3MBTL4 (non-ER binding)

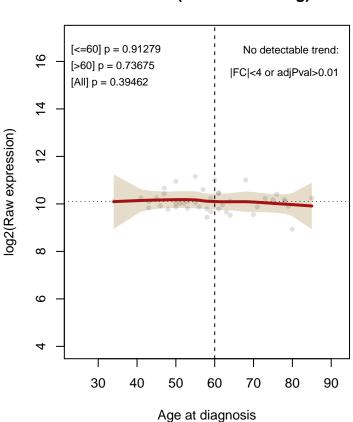




LEF1 (non-ER binding)

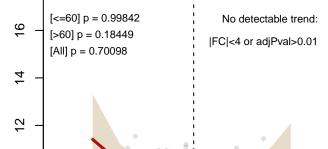
MAP2K1 (non-ER binding)





#### MAP3K1 (non-ER binding)

# |



log2(Raw expression)

19

 $\infty$ 

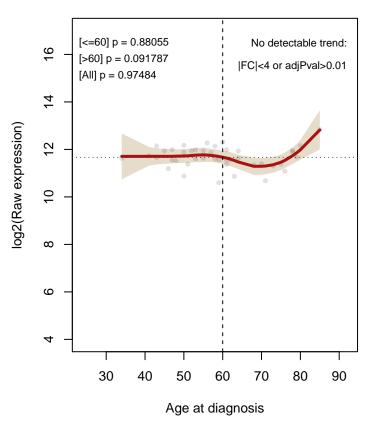
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## MAPK1 (non-ER binding)



MAPK3 (non-ER binding)

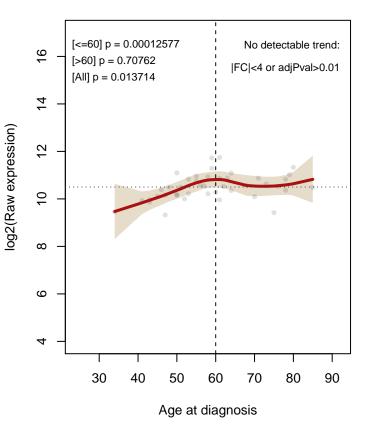
Age at diagnosis

60

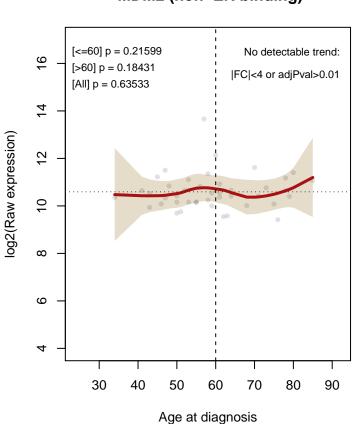
70

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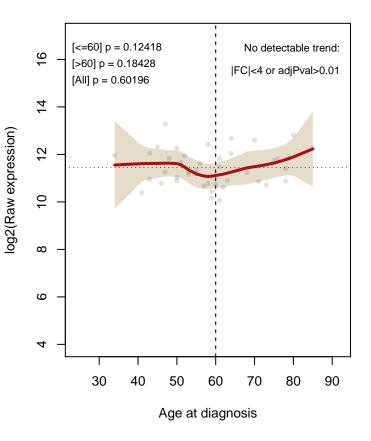


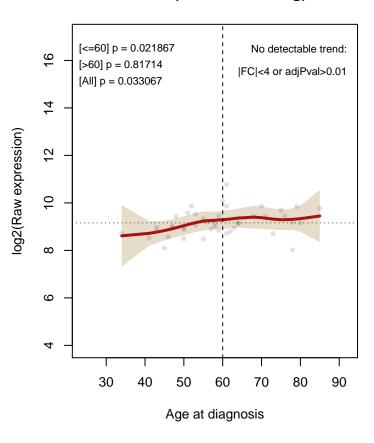
#### MDM2 (non-ER binding)





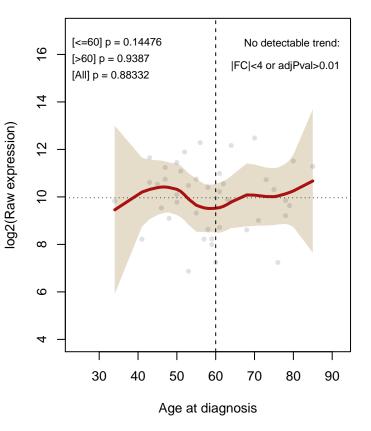
#### MTF2 (non-ER binding)

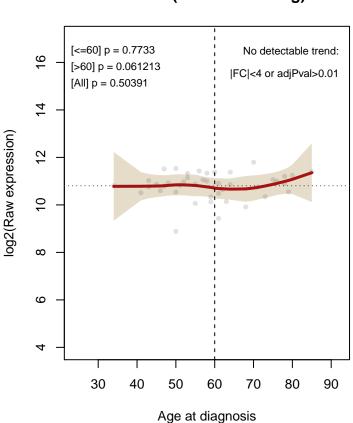




### MYC (non-ER binding)

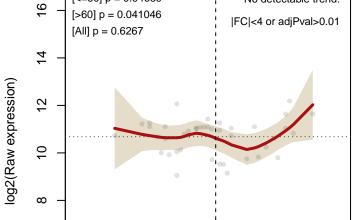
#### NCOA6 (non-ER binding)





### NCOR1 (non-ER binding)

# [<=60] p = 0.94689 No detectable trend:



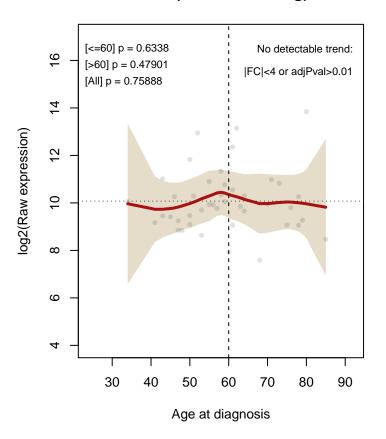
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### NES (non-ER binding)



NFKB1 (non-ER binding)

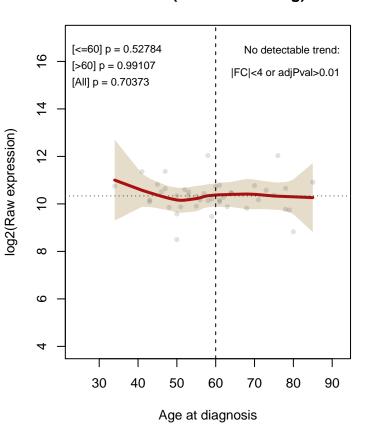
Age at diagnosis

60

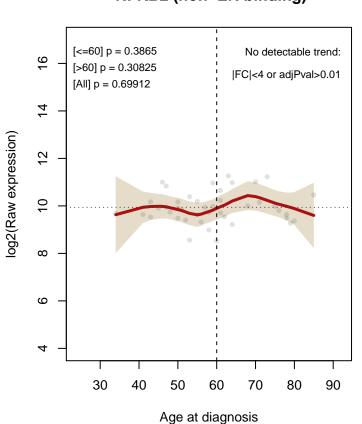
70

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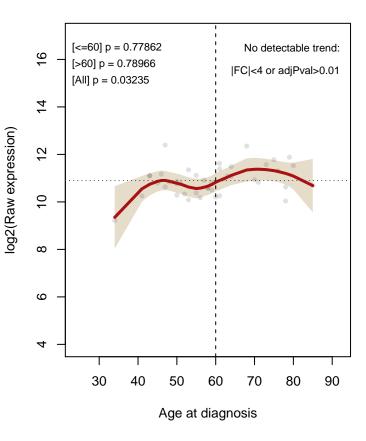


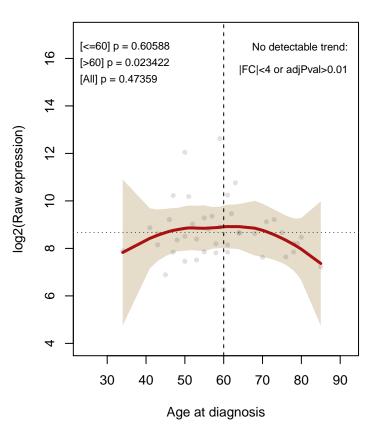
# NFKB2 (non-ER binding)



### NFKBIA (non-ER binding)

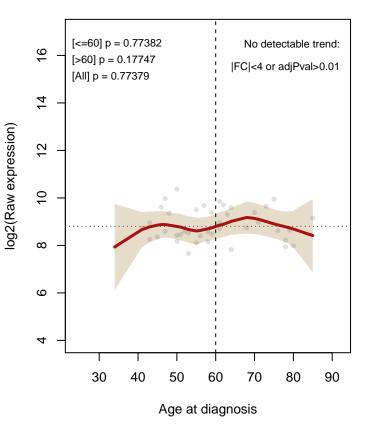
# NFKBIB (non-ER binding)

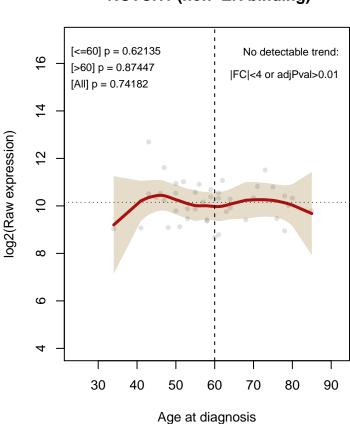




# NFKBIE (non-ER binding)

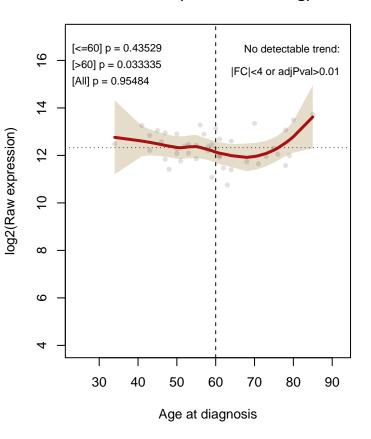
# NOTCH1 (non-ER binding)

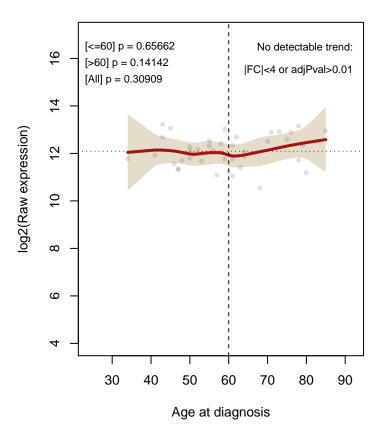




### NOTCH2 (non-ER binding)

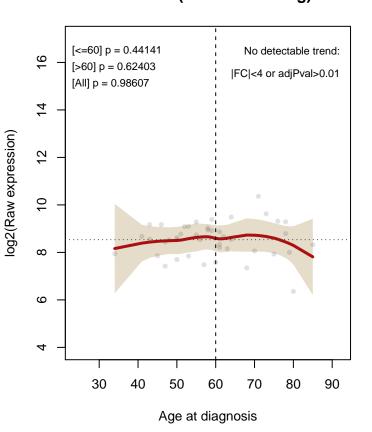
# NOTCH3 (non-ER binding)

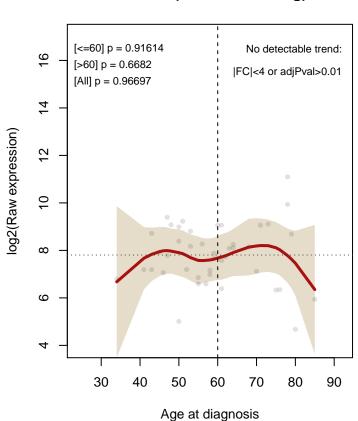




# NOTCH4 (non-ER binding)

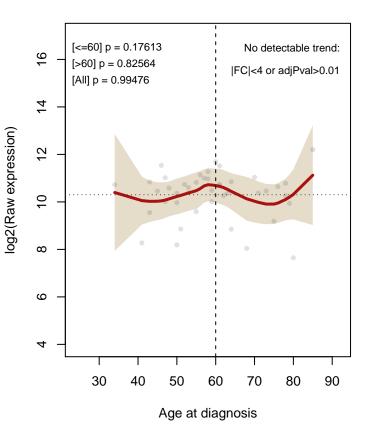
NR4A2 (non-ER binding)

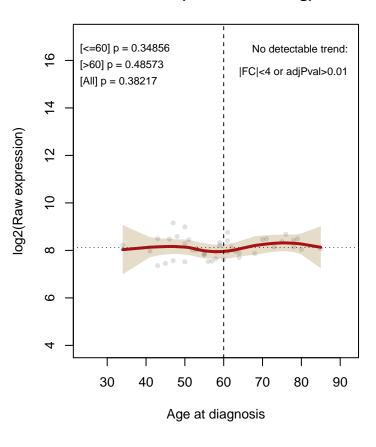




### NRAS (non-ER binding)

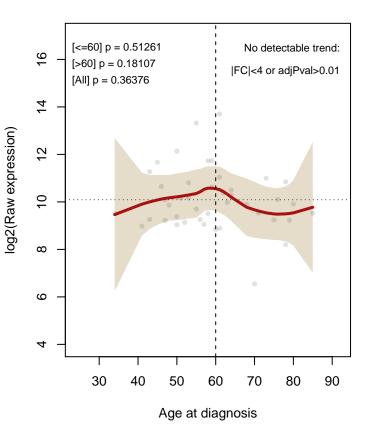
#### PCGF1 (non-ER binding)

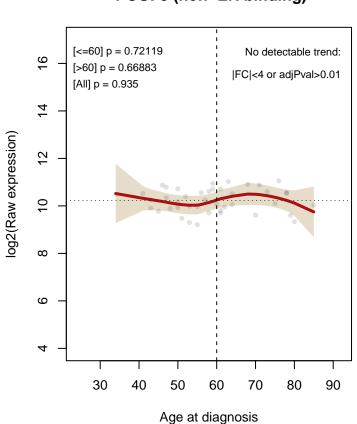




# PCGF2 (non-ER binding)

PCGF3 (non-ER binding)





# PCGF5 (non-ER binding)

#### [<=60] p = 0.80107No detectable trend: [>60] p = 0.86874



16

12

19

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log2(Raw expression)







50

Age at diagnosis

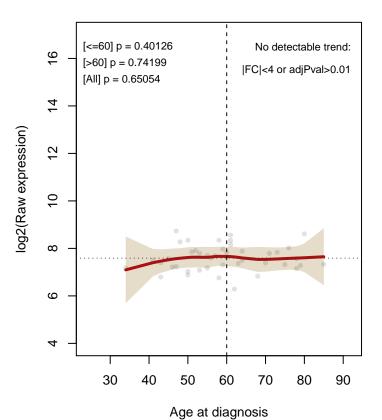
60

70

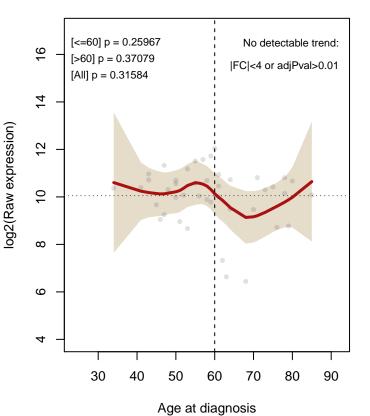
80

90

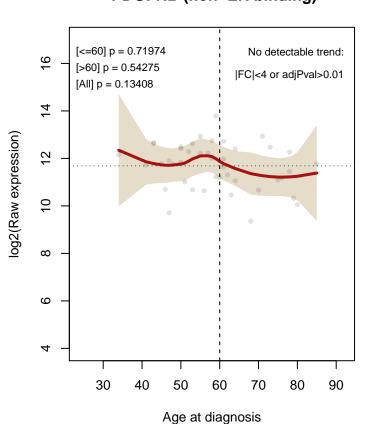
# PCGF6 (non-ER binding)

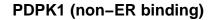


# PDGFRA (non-ER binding)

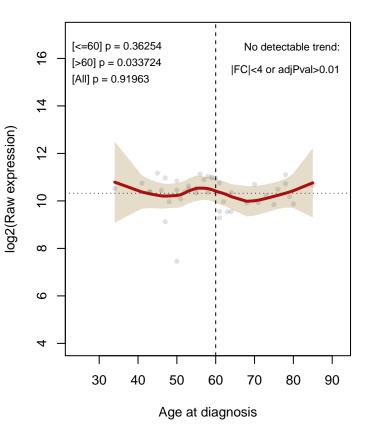


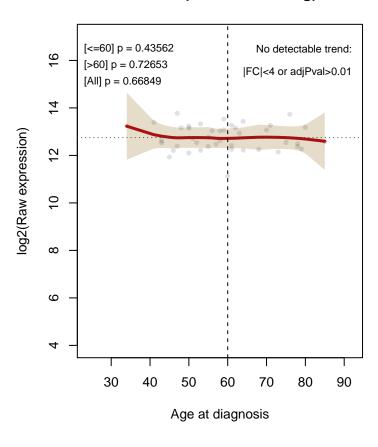
# PDGFRB (non-ER binding)





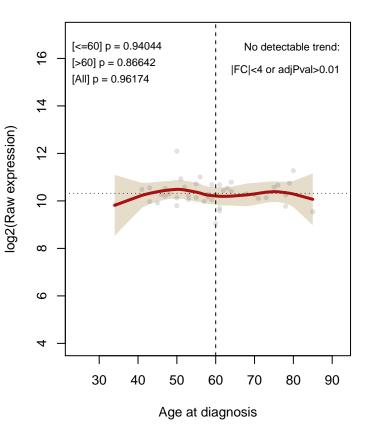
#### PEBP1 (non-ER binding)

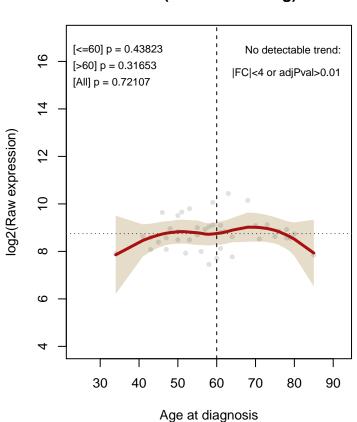


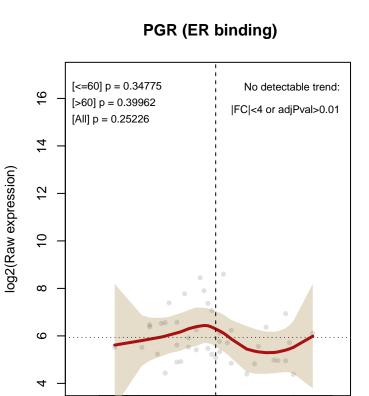


# PELP1 (non-ER binding)

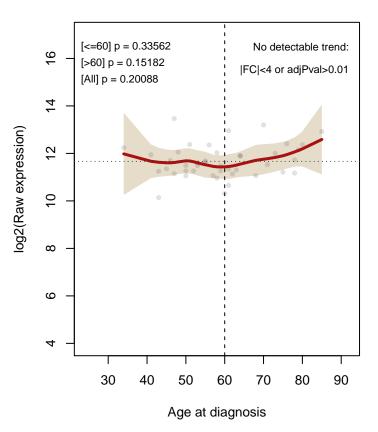
PGP (non-ER binding)





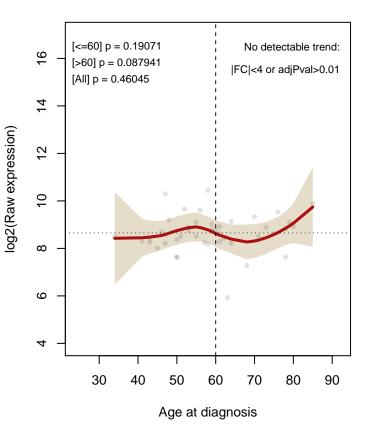


# PHB2 (non-ER binding)

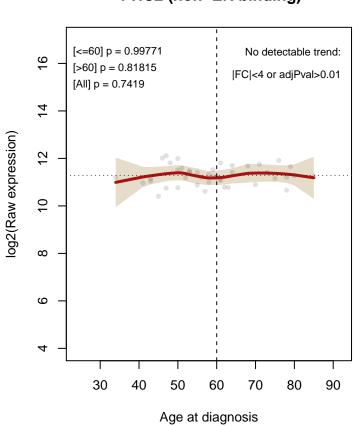


PHC1 (non-ER binding)

Age at diagnosis



PHC2 (non-ER binding)





No detectable trend:

|FC|<4 or adjPval>0.01

[<=60] p = 0.58234

[>60] p = 0.20293

[All] p = 0.28821

30

40

50

16

4

12

10

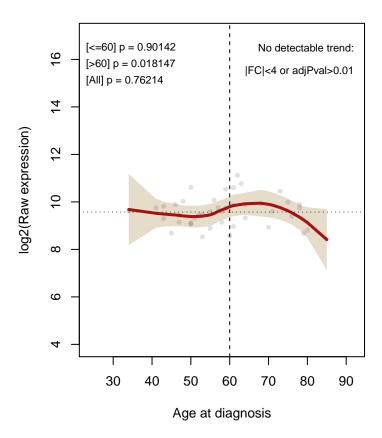
ω

9

log2(Raw expression)

log2(Raw expression)

### PHF1 (non-ER binding)



# PHF19 (non-ER binding)

Age at diagnosis

60

70

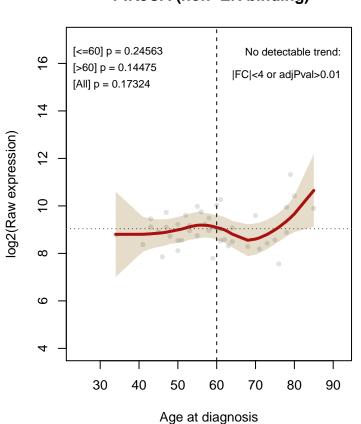
80

90

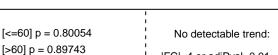
# [<=60] p = 0.87293No detectable trend: 16 [>60] p = 0.94442 |FC|<4 or adjPval>0.01 [AII] p = 0.569024 12 10 ω 9 30 40 50 60 70 80 90

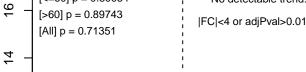
Age at diagnosis

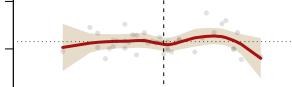
# PIK3CA (non-ER binding)



### PIP5K1C (non-ER binding)







log2(Raw expression)

12

19

30

40



50

Age at diagnosis

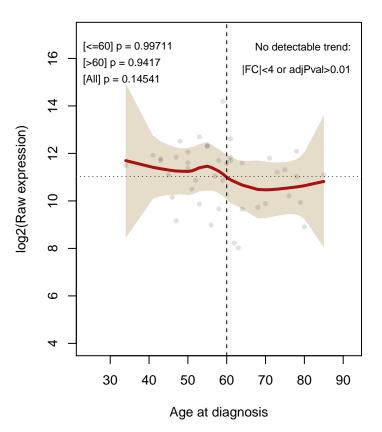
60

70

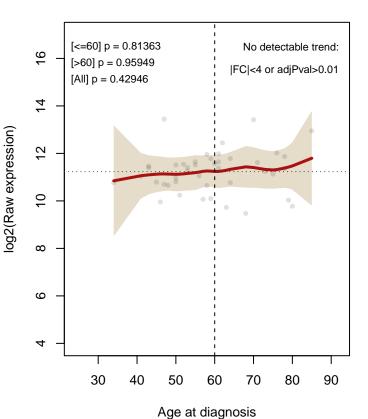
80

90

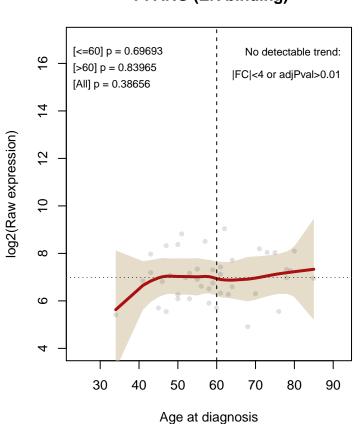
# PLAU (non-ER binding)

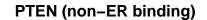


# PODXL (non-ER binding)

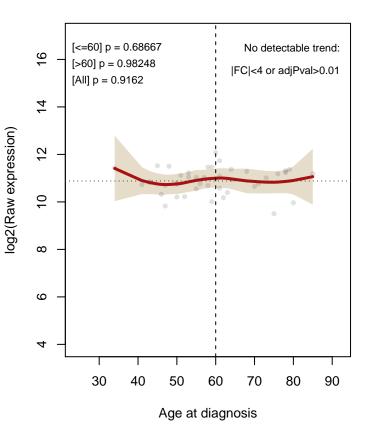


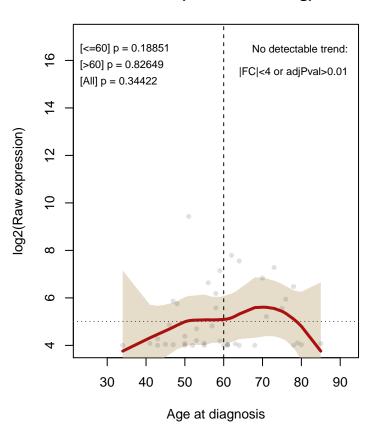
# **PPARG (ER binding)**





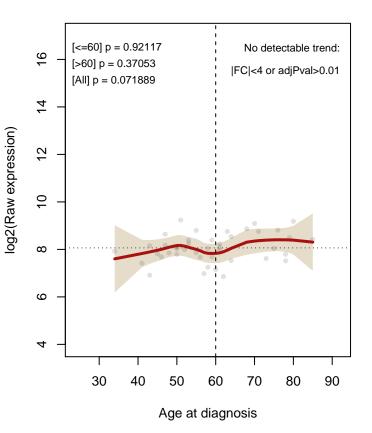
### **PYDC1** (non-ER binding)

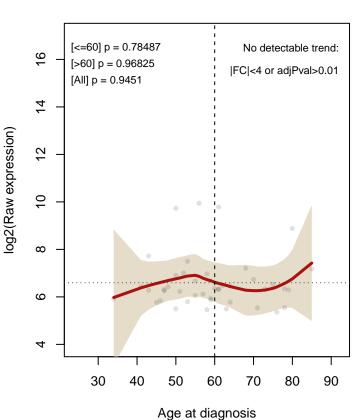




# RAD51 (non-ER binding)

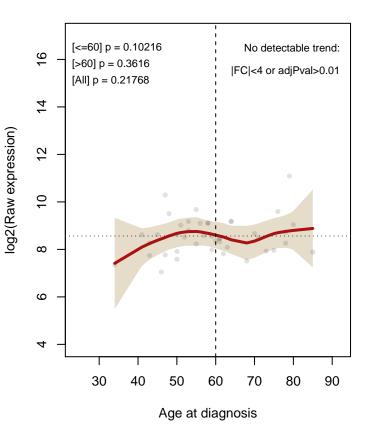
RAD51B (ER binding)

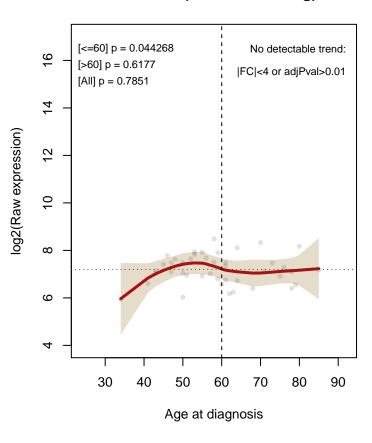




### RAD51C (non-ER binding)

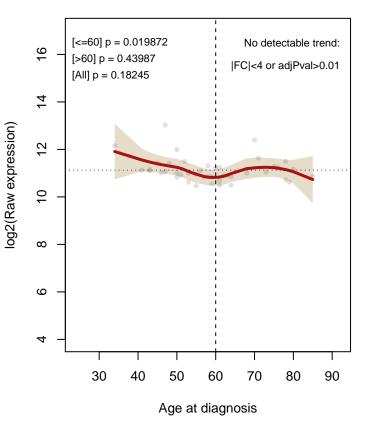
#### RAD51D (non-ER binding)

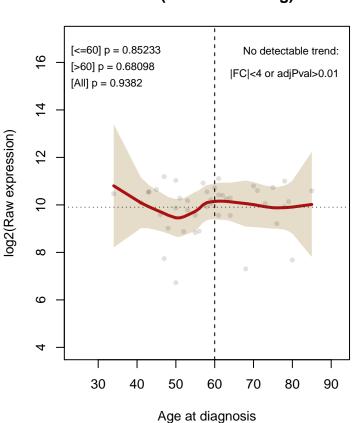


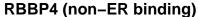


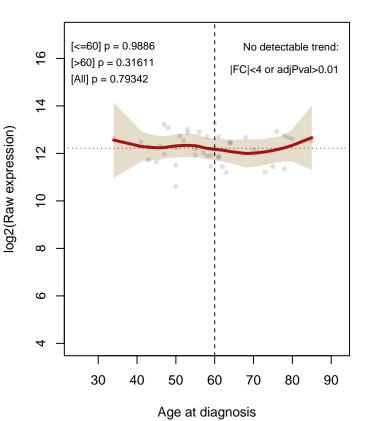
RAF1 (non-ER binding)

RB1 (non-ER binding)

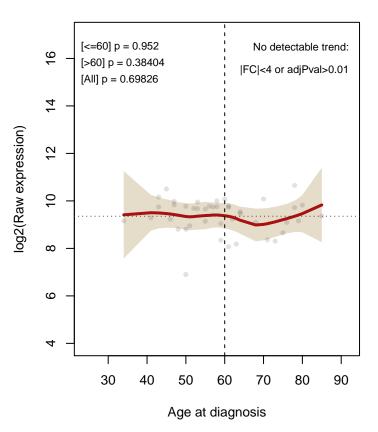




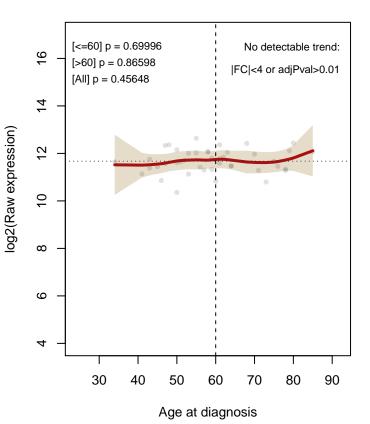




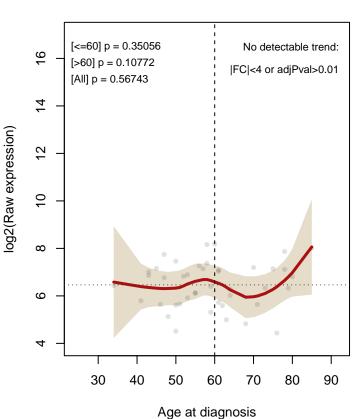
### RBBP5 (non-ER binding)



# RBBP7 (non-ER binding)

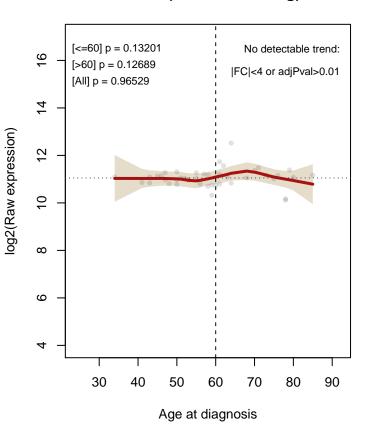


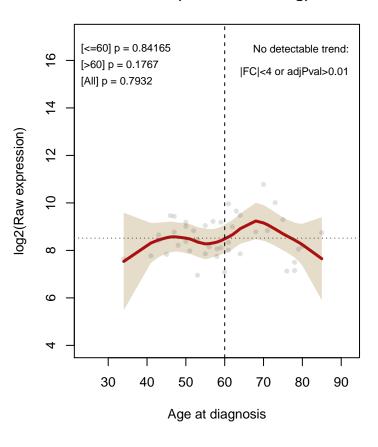
# **REL** (non-ER binding)



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

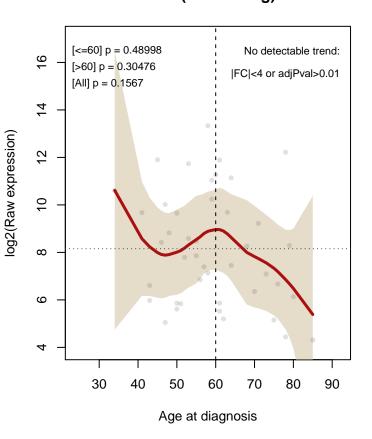
#### **RELB** (non-ER binding)

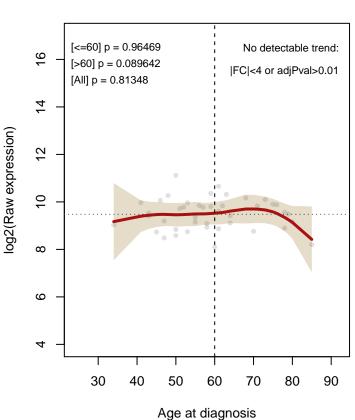


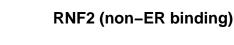


# **RET (ER binding)**

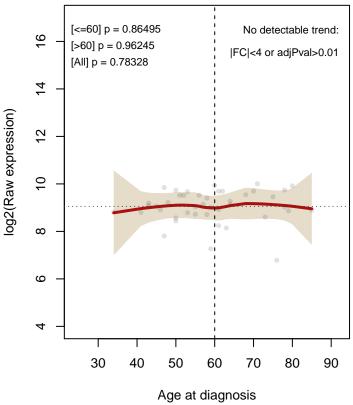
RING1 (non-ER binding)

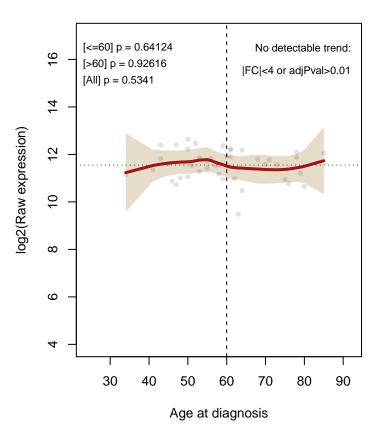






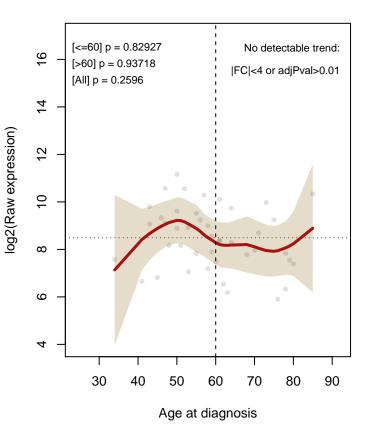
# **RUNX1 (ER binding)**

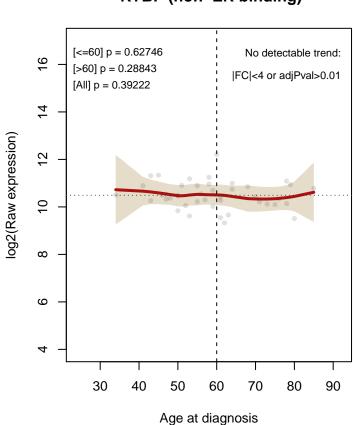




# **RUNX3 (non-ER binding)**

RYBP (non-ER binding)

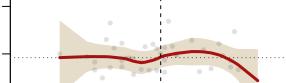




#### SCMH1 (non-ER binding)

# [<=60] p = 0.50889No detectable trend:





log2(Raw expression)

12

10

30

40



Age at diagnosis

60

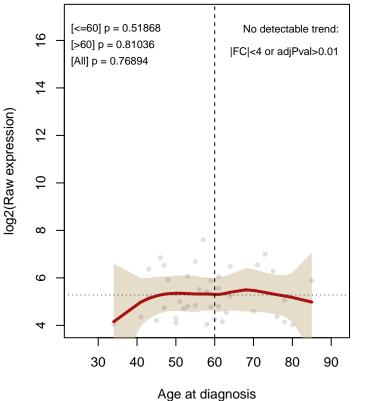
SCML4 (non-ER binding)

70

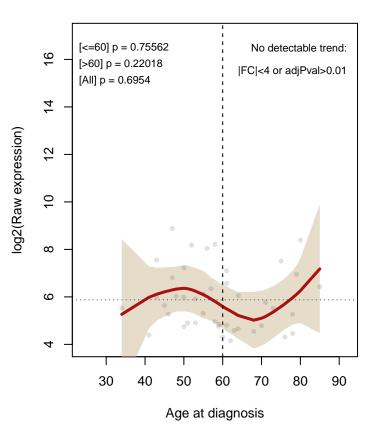
80

90

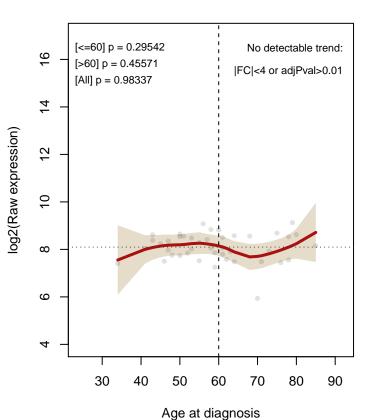
50



### SCML2 (non-ER binding)

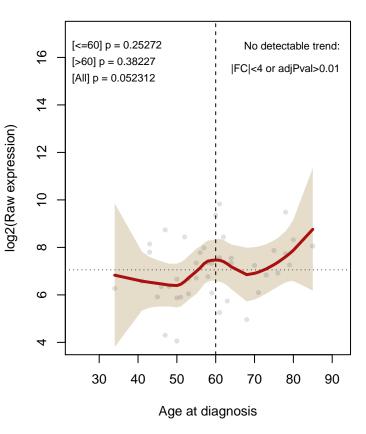


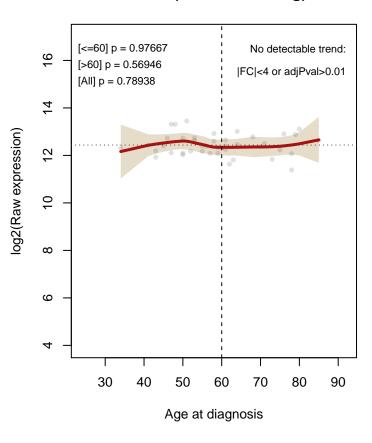
# SFMBT1 (ER binding)





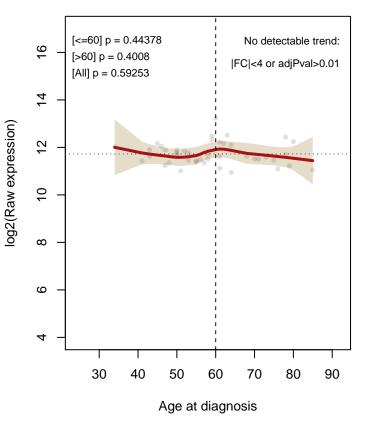
#### SFPQ (non-ER binding)

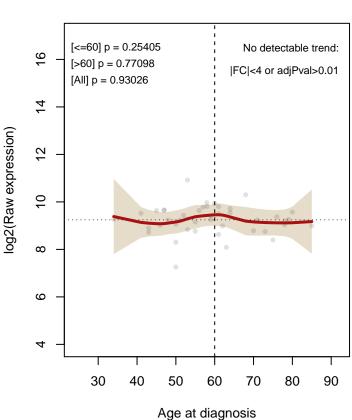




SHC1 (non-ER binding)

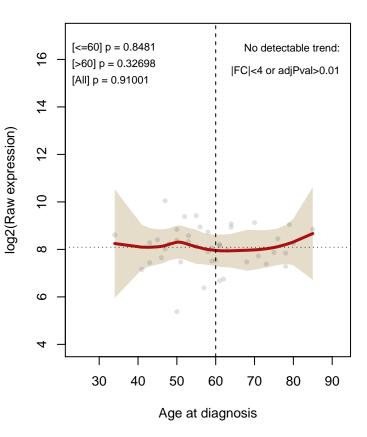
SIRT1 (non-ER binding)

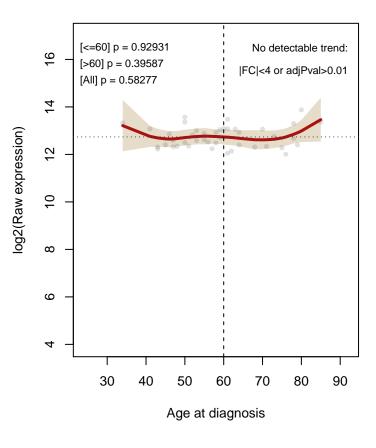




#### SKP2 (non-ER binding)

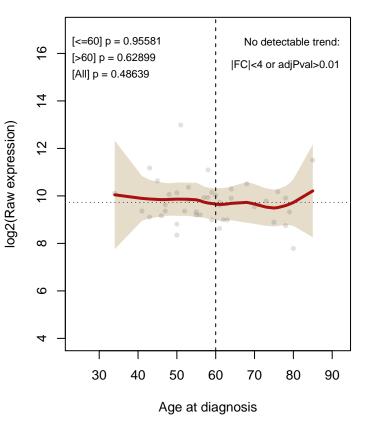
# SLC25A3 (non-ER binding)

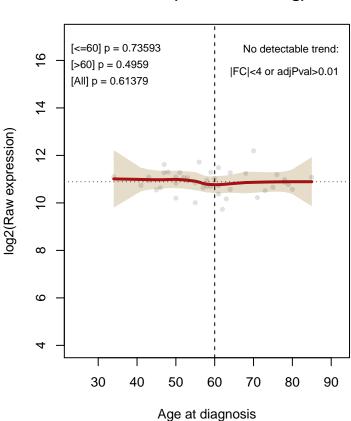




# SMAD1 (non-ER binding)

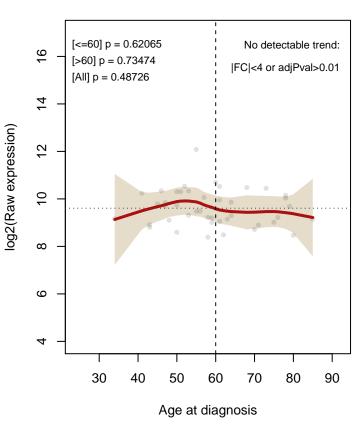
SMAD2 (non-ER binding)

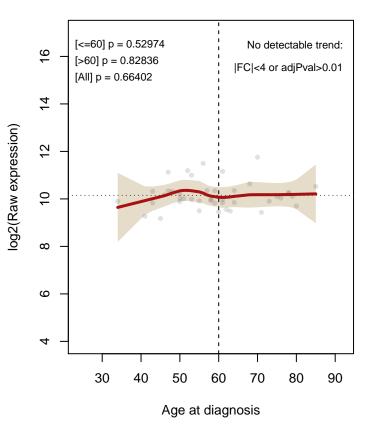




### **SMAD3 (ER binding)**

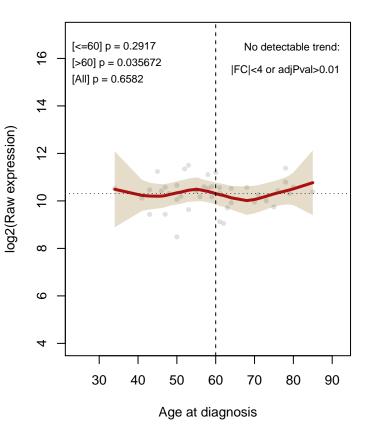
# SMAD4 (non-ER binding)

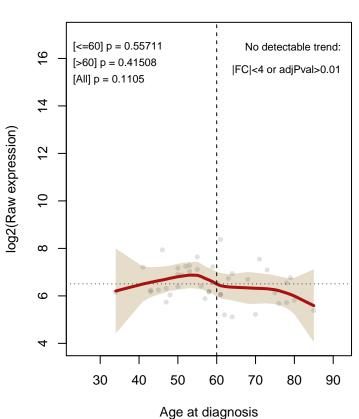




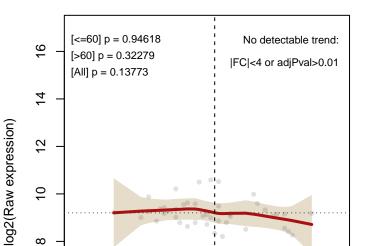
# SMAD5 (non-ER binding)

# SMAD6 (non-ER binding)





### SMAD7 (non-ER binding)



ω

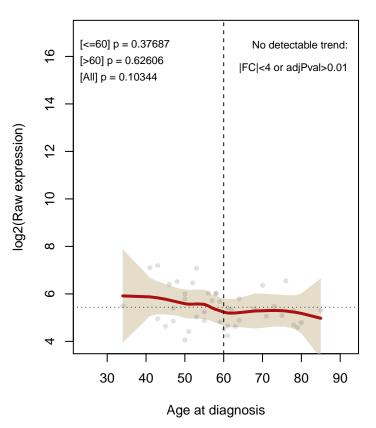
9

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# SMAD9 (non-ER binding)



# SOS1 (non-ER binding)

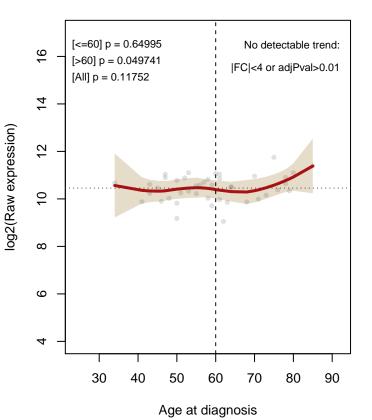
Age at diagnosis

60

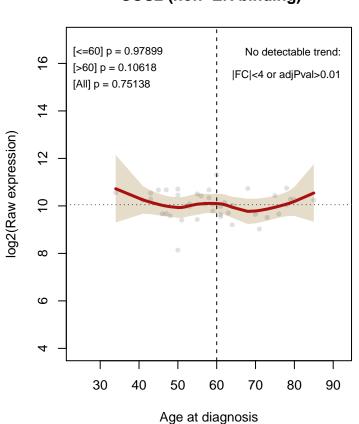
70

80

90



# SOS2 (non-ER binding)



#### SP1 (non-ER binding) SRC (non-ER binding) [<=60] p = 0.81475No detectable trend: [<=60] p = 0.36521No detectable trend: 16 16 [>60] p = 0.21075 [>60] p = 0.73374 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.61157[All] p = 0.477834 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 STAT3 (non-ER binding) STAT1 (ER binding) [<=60] p = 0.11088No detectable trend: [<=60] p = 0.89192 No detectable trend: 16 16 [>60] p = 0.77788 [>60] p = 0.11979 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.16242[All] p = 0.995034 4 log2(Raw expression) log2(Raw expression) 12 12 10 10 ω $\infty$ 9 9

30

40

50

60

Age at diagnosis

70

80

90

30

40

50

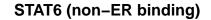
60

Age at diagnosis

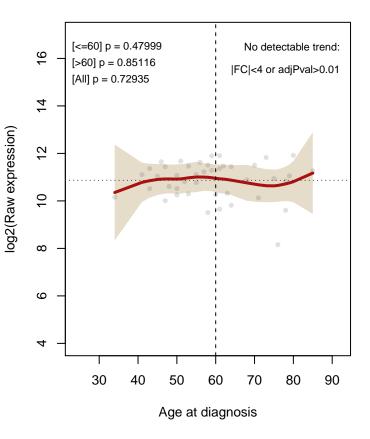
70

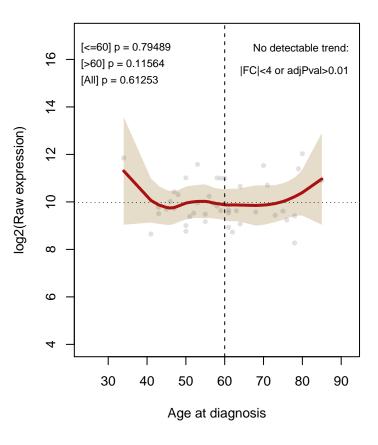
80

90



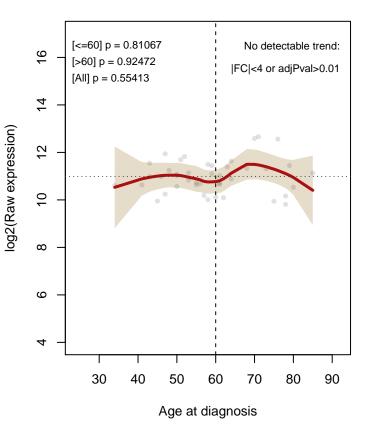
### SUZ12 (non-ER binding)

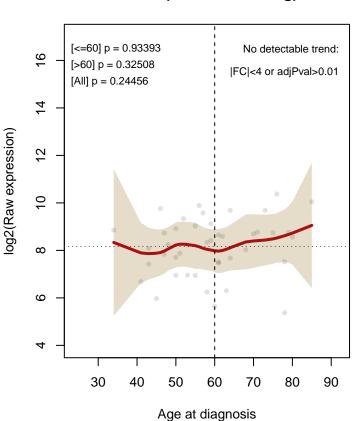




TCF3 (non-ER binding)

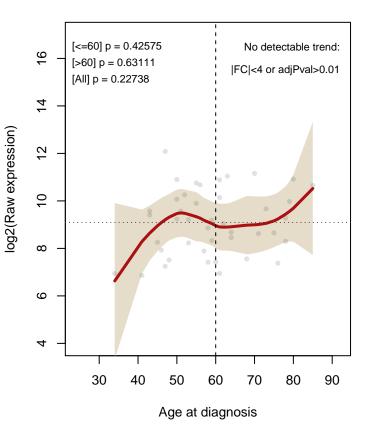
TCF7 (non-ER binding)

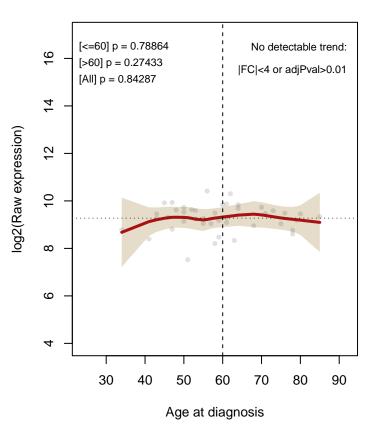






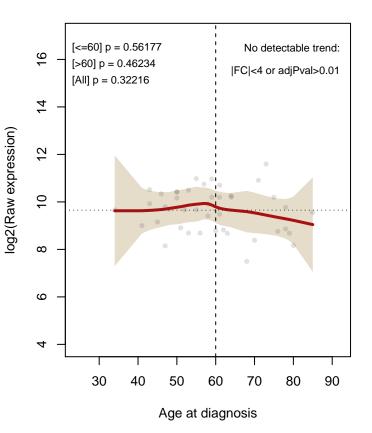
# TCF7L2 (non-ER binding)

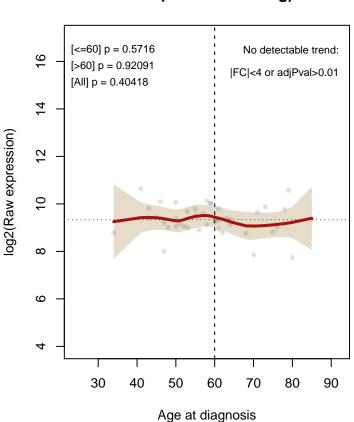




TGFB1 (non-ER binding)

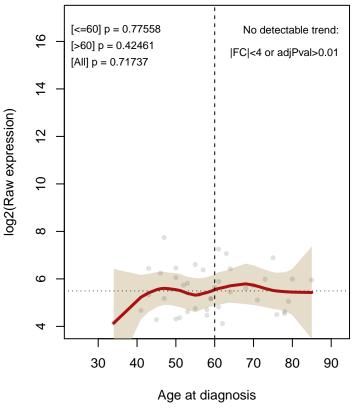
TK2 (non-ER binding)

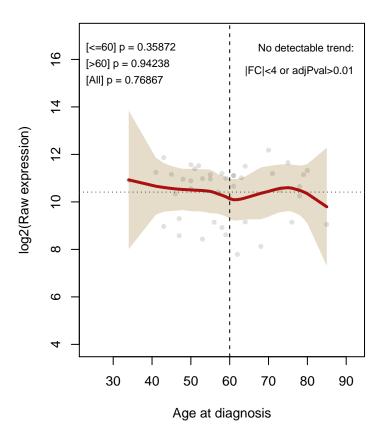






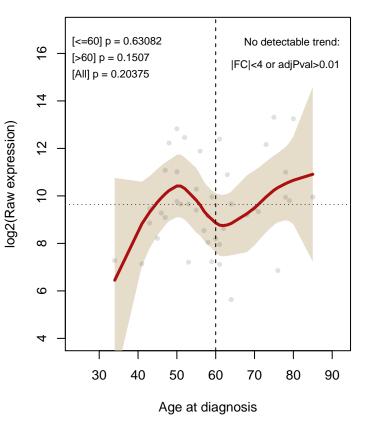
### TP53 (non-ER binding)

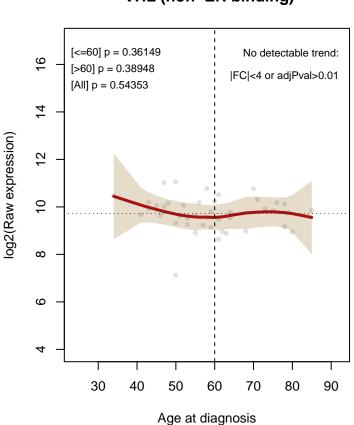




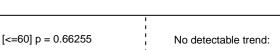
TRIM29 (non-ER binding)

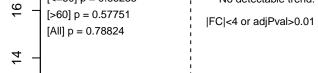
VHL (non-ER binding)

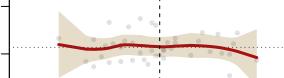




### WDR5 (non-ER binding)

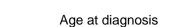




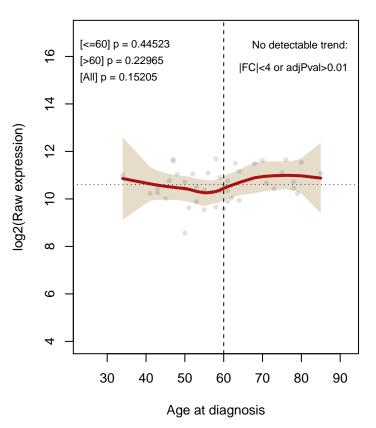


log2(Raw expression)

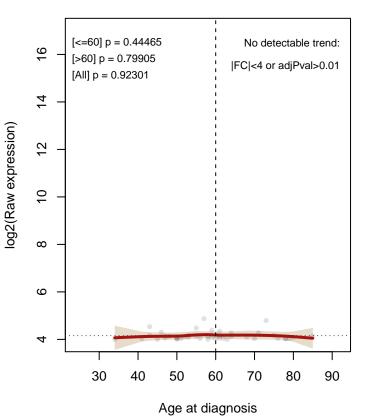
# ω



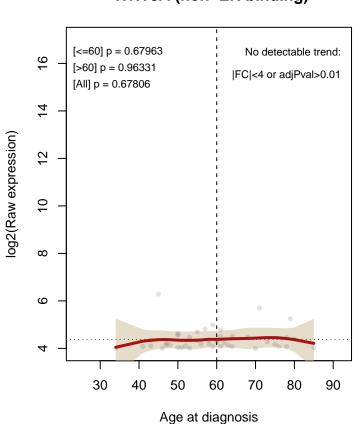
# WHSC1 (non-ER binding)



# WNT1 (non-ER binding)

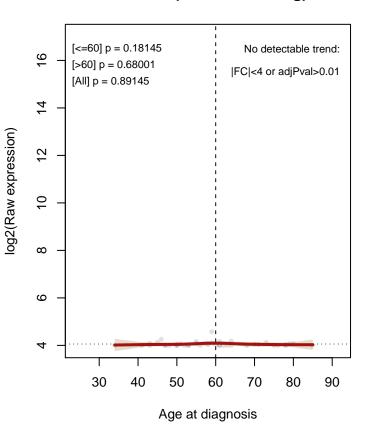


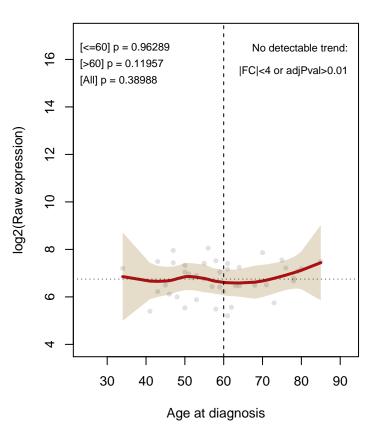
# WNT3A (non-ER binding)



### WNT7A (non-ER binding)

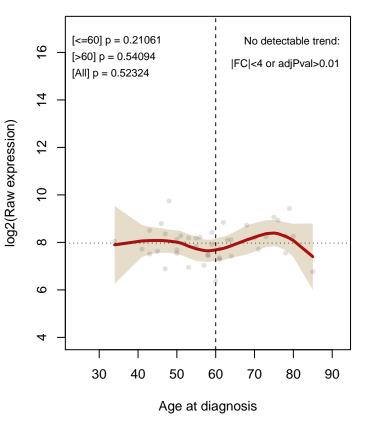
### XRCC2 (non-ER binding)

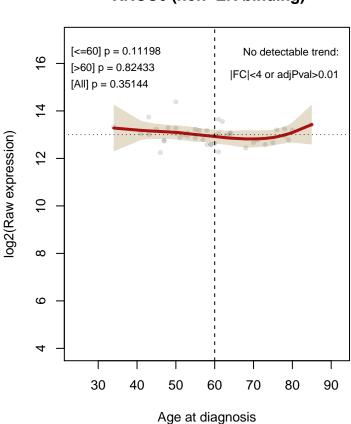




# XRCC3 (non-ER binding)

XRCC6 (non-ER binding)

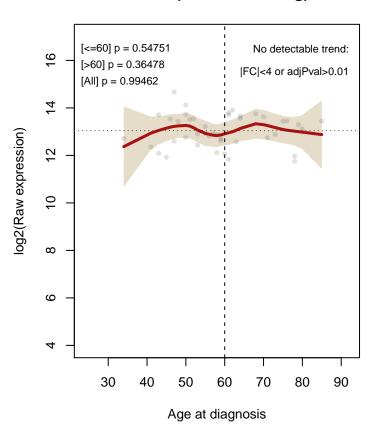




### YAF2 (non-ER binding)

# 

# YBX1 (non-ER binding)



# YY1 (non-ER binding)

Age at diagnosis

