iClust 2: N = 72 iClust 1: N = 140ATM|ILMN\_1716231 ATM|ILMN\_1716231 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.38848[<=60] p = 0.61575No detectable trend: No detectable trend: 16 16 [>60] p = 0.92441 |FC|<4 or adjPval>0.01 [>60] p = 0.19059 |FC|<4 or adjPval>0.01 [AII] p = 0.10513[AII] p = 0.0437994 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis iClust 4: N = 344iClust 3: N = 294ATM|ILMN\_1716231 ATM|ILMN\_1716231 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.017711 No detectable trend: [<=60] p = 0.71058No detectable trend: 16 16 [>60] p = 0.92008[>60] p = 0.16153 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.2616[All] p = 0.219784 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10

ω

9

20

40

60

Age at diagnosis

80

100

ω

9

20

40

60

Age at diagnosis

80

100

iClust 6: N = 86 iClust 5: N = 191 ATM|ILMN\_1716231 ATM|ILMN\_1716231 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.22826 No detectable trend: [<=60] p = 0.73687No detectable trend: 16 16 [>60] p = 0.4621 |FC|<4 or adjPval>0.01 [>60] p = 0.1336 |FC|<4 or adjPval>0.01 [AII] p = 0.49643[AII] p = 0.632084 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis iClust 7: N = 193iClust 8: N = 300ATM|ILMN\_1716231 ATM|ILMN\_1716231 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.8008No detectable trend: [<=60] p = 0.66339No detectable trend: 16 16 [>60] p = 0.86259 |FC|<4 or adjPval>0.01 [>60] p = 0.53325 |FC|<4 or adjPval>0.01 [AII] p = 0.69444[AII] p = 0.148074 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω

9

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Age at diagnosis

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100

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Age at diagnosis

80

100

iClust 9: N = 146 ATM|ILMN\_1716231

NKI Tier 1: non-ER binding; Tier 2: ER binding

iClust 10: N = 226 ATM|ILMN\_1716231 NKI Tier 1: non-ER binding; Tier 2: ER binding

