iClust 1: N = 140 iClust 2: N = 72 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 = 0.61575[<=60] p = 0.38848No detectable trend: No detectable trend: 16 16 [>60] p = 0.92441 |FC|<1.25 or adjPval>0.01 [>60] p = 0.19059 |FC|<1.25 or adjPval>0.01 [AII] p = 0.043799[AII] p = 0.105134 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 3: N = 294iClust 4: N = 344ATM|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|FC|<1.25 or adjPval>0.01 [>60] p = 0.16153 |FC|<1.25 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 5: N = 191 iClust 6: N = 86ATM|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|<1.25 or adjPval>0.01 [>60] p = 0.1336 |FC|<1.25 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 = 0.8008[<=60] p = 0.66339No detectable trend: No detectable trend: 16 16 [>60] p = 0.86259 |FC|<1.25 or adjPval>0.01 [>60] p = 0.53325 |FC|<1.25 or adjPval>0.01 [AII] p = 0.69444[All] p = 0.148074 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9

20

40

60

Age at diagnosis

80

100

20

40

60

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

