iClust 1: N = 140 iClust 2: N = 72 ERK1|ILMN_2402341 (non-ER binding) ERK1|ILMN_2402341 (non-ER binding) [<=60] p = 0.85426No detectable trend: [<=60] p = 0.29519No detectable trend: 16 16 [>60] p = 0.78093[>60] p = 0.02325 |FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.48232[AII] p = 0.00608964 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 = 294 iClust 4: N = 344 ERK1|ILMN_2402341 (non-ER binding) ERK1|ILMN_2402341 (non-ER binding) [<=60] p = 0.0021249 No detectable trend: [<=60] p = 0.0054514 No detectable trend: 16 16 [>60] p = 0.19633[>60] p = 0.7942|FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.21166[AII] p = 0.0204554 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ∞ 9 9 20 40 60 80 100 20 40 60 80 100

Age at diagnosis

Age at diagnosis

iClust 5: N = 191 iClust 6: N = 86 ERK1|ILMN_2402341 (non-ER binding) ERK1|ILMN_2402341 (non-ER binding) [<=60] p = 0.21515 No detectable trend: [<=60] p = 0.99199No detectable trend: 16 16 [>60] p = 0.00045455 [>60] p = 0.39387|FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.31873[AII] p = 0.129694 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10 ω ∞ 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis iClust 7: N = 193 iClust 8: N = 300 ERK1|ILMN_2402341 (non-ER binding) ERK1|ILMN_2402341 (non-ER binding) [<=60] p = 0.28263No detectable trend: [<=60] p = 0.9756No detectable trend: 16 16 [>60] p = 0.61632 |FC|<1.25 or adjPval>0.01 [>60] p = 0.40279 |FC|<1.25 or adjPval>0.01 [AII] p = 0.33098[AII] p = 0.116254 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ∞ 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis

iClust 9: N = 146 ERK1|ILMN_2402341 (non-ER binding)

iClust 10: N = 226 ERK1|ILMN_2402341 (non-ER binding)

