iClust 1: N = 140 iClust 2: N = 72 ERK1|ILMN_1667260 (non-ER binding) ERK1|ILMN_1667260 (non-ER binding) [<=60] p = 0.78368No detectable trend: [<=60] p = 0.94283No detectable trend: 16 16 [>60] p = 0.86183[>60] p = 0.3156 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.39956[AII] p = 0.0664114 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 3: N = 294 iClust 4: N = 344 ERK1|ILMN_1667260 (non-ER binding) ERK1|ILMN_1667260 (non-ER binding) [<=60] p = 0.012263No detectable trend: [<=60] p = 0.049735No detectable trend: 16 16 [>60] p = 0.055673|FC|<2 or adjPval>0.01 [>60] p = 0.74077|FC|<2 or adjPval>0.01 [AII] p = 0.25635[AII] p = 0.466674 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 5: N = 191 iClust 6: N = 86 ERK1|ILMN_1667260 (non-ER binding) ERK1|ILMN_1667260 (non-ER binding) [<=60] p = 0.78476No detectable trend: [<=60] p = 0.47886No detectable trend: 16 16 [>60] p = 0.00020467 [>60] p = 0.90776|FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.285[AII] p = 0.216264 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_1667260 (non-ER binding) ERK1|ILMN_1667260 (non-ER binding) [<=60] p = 0.96732[<=60] p = 0.3829No detectable trend: No detectable trend: 16 16 [>60] p = 0.33717 |FC|<2 or adjPval>0.01 [>60] p = 0.96417 |FC|<2 or adjPval>0.01 [AII] p = 0.30181[All] p = 0.295194 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 19 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_1667260 (non-ER binding)

iClust 10: N = 226 ERK1|ILMN_1667260 (non-ER binding)

