iClust 1: N = 140 iClust 2: N = 72 STAT1|ILMN\_1691364 (ER binding) STAT1|ILMN\_1691364 (ER binding) [<=60] p = 0.71713No detectable trend: [<=60] p = 0.0024988No detectable trend: 16 16 [>60] p = 0.51623 [>60] p = 0.82303 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.68436[AII] p = 0.0285374 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω  $\infty$ 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 STAT1|ILMN\_1691364 (ER binding) STAT1|ILMN\_1691364 (ER binding) [<=60] p = 0.063247[<=60] p = 0.52439No detectable trend: No detectable trend: 16 16 [>60] p = 0.5508|FC|<4 or adjPval>0.01 [>60] p = 0.38454|FC|<4 or adjPval>0.01 [AII] p = 0.12816[AII] p = 0.935894 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10 ω  $\infty$ 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 STAT1|ILMN\_1691364 (ER binding) STAT1|ILMN\_1691364 (ER binding) [<=60] p = 0.19885No detectable trend: [<=60] p = 0.92808No detectable trend: 16 16 [>60] p = 0.60287 [>60] p = 0.64834|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.97914[AII] p = 0.688424 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10  $\infty$  $\infty$ 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 STAT1|ILMN\_1691364 (ER binding) STAT1|ILMN\_1691364 (ER binding) [<=60] p = 0.72068No detectable trend: [<=60] p = 0.55198No detectable trend: 16 16 [>60] p = 0.56047|FC|<4 or adjPval>0.01 [>60] p = 0.31671 |FC|<4 or adjPval>0.01 [AII] p = 0.70481[AII] p = 0.0843644 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω  $\infty$ 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis

iClust 9: N = 146 STAT1|ILMN\_1691364 (ER binding)

iClust 10: N = 226 STAT1|ILMN\_1691364 (ER binding)

