iClust 1: N = 140 iClust 2: N = 72 STAT3|ILMN_2401978 (non-ER binding) STAT3|ILMN_2401978 (non-ER binding) [<=60] p = 0.05663No detectable trend: [<=60] p = 0.17159No detectable trend: 16 16 [>60] p = 0.07913[>60] p = 0.39307|FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.00014863[All] p = 0.24134 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 STAT3|ILMN_2401978 (non-ER binding) STAT3|ILMN_2401978 (non-ER binding) [<=60] p = 0.94598No detectable trend: [<=60] p = 0.64547No detectable trend: 16 16 [>60] p = 0.05658|FC|<2 or adjPval>0.01 [>60] p = 0.091726 |FC|<2 or adjPval>0.01 [AII] p = 0.63379[AII] p = 0.148344 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 STAT3|ILMN_2401978 (non-ER binding) STAT3|ILMN_2401978 (non-ER binding) [<=60] p = 0.77739 No detectable trend: [<=60] p = 0.32047No detectable trend: 16 16 [>60] p = 0.80652[>60] p = 0.094131 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.0049875[AII] p = 0.990814 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 STAT3|ILMN_2401978 (non-ER binding) STAT3|ILMN_2401978 (non-ER binding) [<=60] p = 0.59076No detectable trend: [<=60] p = 0.6741No detectable trend: 16 16 [>60] p = 0.87642|FC|<2 or adjPval>0.01 [>60] p = 0.68831 |FC|<2 or adjPval>0.01 [AII] p = 0.78856[All] p = 0.956334 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 9: N = 146 STAT3|ILMN_2401978 (non-ER binding)

iClust 10: N = 226 STAT3|ILMN_2401978 (non-ER binding)

