iClust 1: N = 140 iClust 2: N = 72 Beta-catenin|ILMN\_1746396 (non-ER binding) Beta-catenin|ILMN\_1746396 (non-ER binding) [<=60] p = 0.77231No detectable trend: [<=60] p = 0.79804No detectable trend: 16 16 [>60] p = 0.17317 |FC|<4 or adjPval>0.01 [>60] p = 0.28569 |FC|<4 or adjPval>0.01 [All] p = 0.1608[AII] p = 0.954014 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9 20 40 60 80 20 40 60 80 100 100 Age at diagnosis Age at diagnosis iClust 3: N = 294 iClust 4: N = 344 Beta-catenin|ILMN\_1746396 (non-ER binding) Beta-catenin|ILMN\_1746396 (non-ER binding) [<=60] p = 0.063744[<=60] p = 0.057782No detectable trend: No detectable trend: 16 16 [>60] p = 0.010316 [>60] p = 0.4858|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.15612[AII] p = 0.0443574 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10  $\infty$  $\infty$ 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 Beta-catenin|ILMN\_1746396 (non-ER binding) Beta-catenin|ILMN\_1746396 (non-ER binding) [<=60] p = 0.99619No detectable trend: [<=60] p = 0.40515No detectable trend: 16 16 [>60] p = 0.9271[>60] p = 0.092472|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [All] p = 0.2199[AII] p = 0.714724 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω  $\infty$ 9 9 20 40 60 80 20 40 60 80 100 100 Age at diagnosis Age at diagnosis iClust 7: N = 193 iClust 8: N = 300 Beta-catenin|ILMN\_1746396 (non-ER binding) Beta-catenin|ILMN\_1746396 (non-ER binding) [<=60] p = 0.41481 No detectable trend: [<=60] p = 0.17282No detectable trend: 16 16 [>60] p = 0.62154 |FC|<4 or adjPval>0.01 [>60] p = 0.32625 |FC|<4 or adjPval>0.01 [AII] p = 0.69384[AII] p = 0.4714 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10  $\infty$  $\infty$ 9 9 20 40 60 80 100 20 40 60 80 100 Age at diagnosis Age at diagnosis

iClust 9: N = 146 Beta-catenin|ILMN\_1746396 (non-ER binding)

iClust 10: N = 226
Beta-catenin|ILMN\_1746396 (non-ER binding)

