iClust 1: N = 140 iClust 2: N = 72 COL17A1|ILMN\_1799105 (non-ER binding) COL17A1|ILMN\_1799105 (non-ER binding) [<=60] p = 0.013914 No detectable trend: [<=60] p = 0.77665No detectable trend: 16 16 [>60] p = 0.53343[>60] p = 0.10697 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.0019391[AII] p = 0.344574 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 4: N = 344 iClust 3: N = 294 COL17A1|ILMN\_1799105 (non-ER binding) COL17A1|ILMN\_1799105 (non-ER binding) [<=60] p = 0.12341 No detectable trend: [<=60] p = 0.27083No detectable trend: 16 16 [>60] p = 0.01492|FC|<2 or adjPval>0.01 [>60] p = 0.0142 |FC|<2 or adjPval>0.01 [AII] p = 4.0122e - 09[AII] p = 1.5279e - 064 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω  $\infty$ 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 COL17A1|ILMN\_1799105 (non-ER binding) COL17A1|ILMN\_1799105 (non-ER binding) [<=60] p = 0.020681 No detectable trend: [<=60] p = 0.23395No detectable trend: 16 16 [>60] p = 0.1641 [>60] p = 0.0021891 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.00083656[AII] p = 0.000940824 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 7: N = 193 iClust 8: N = 300 COL17A1|ILMN\_1799105 (non-ER binding) COL17A1|ILMN\_1799105 (non-ER binding) [<=60] p = 0.010483[<=60] p = 0.0097188No detectable trend: No detectable trend: 16 16 [>60] p = 0.064957|FC|<2 or adjPval>0.01 [>60] p = 0.0025655 |FC|<2 or adjPval>0.01 [AII] p = 6.0167e - 06[All] p = 1.5841e-124 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 COL17A1|ILMN\_1799105 (non-ER binding)

iClust 10: N = 226 COL17A1|ILMN\_1799105 (non-ER binding)

