iClust 1: N = 140 iClust 2: N = 72 HDAC2|ILMN\_1767747 (non-ER binding) HDAC2|ILMN\_1767747 (non-ER binding) [<=60] p = 0.26437No detectable trend: [<=60] p = 0.41616No detectable trend: 16 16 [>60] p = 0.067429[>60] p = 0.86079|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.0031334[AII] p = 0.319834 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 HDAC2|ILMN\_1767747 (non-ER binding) HDAC2|ILMN\_1767747 (non-ER binding) [<=60] p = 0.018292[<=60] p = 0.11692No detectable trend: No detectable trend: 16 16 [>60] p = 0.53808|FC|<4 or adjPval>0.01 [>60] p = 0.41973 |FC|<4 or adjPval>0.01 [AII] p = 0.061772[AII] p = 0.191374 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 5: N = 191 iClust 6: N = 86 HDAC2|ILMN\_1767747 (non-ER binding) HDAC2|ILMN\_1767747 (non-ER binding) [<=60] p = 0.71806No detectable trend: [<=60] p = 0.42152No detectable trend: 16 16 [>60] p = 0.12384 [>60] p = 0.56897|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.1383[AII] p = 0.501354 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10 ω 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 HDAC2|ILMN\_1767747 (non-ER binding) HDAC2|ILMN\_1767747 (non-ER binding) [<=60] p = 0.99822No detectable trend: [<=60] p = 0.14725No detectable trend: 16 16 [>60] p = 0.068016|FC|<4 or adjPval>0.01 [>60] p = 0.4969|FC|<4 or adjPval>0.01 [AII] p = 0.43703[AII] p = 0.977424 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 9: N = 146 HDAC2|ILMN\_1767747 (non-ER binding)

iClust 10: N = 226 HDAC2|ILMN\_1767747 (non-ER binding)

