iClust 1: N = 140 iClust 2: N = 72 HDAC1|ILMN\_1727458 (ER binding) HDAC1|ILMN\_1727458 (ER binding) [<=60] p = 0.32362No detectable trend: [<=60] p = 0.14238No detectable trend: 16 16 [>60] p = 0.48461 [>60] p = 0.38202|FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.27528[AII] p = 0.277074 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 HDAC1|ILMN\_1727458 (ER binding) HDAC1|ILMN\_1727458 (ER binding) [<=60] p = 0.11021No detectable trend: [<=60] p = 0.11373No detectable trend: 16 16 [>60] p = 0.38445|FC|<1.25 or adjPval>0.01 [>60] p = 0.067254|FC|<1.25 or adjPval>0.01 [AII] p = 0.1161[AII] p = 0.481264 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 5: N = 191 iClust 6: N = 86 HDAC1|ILMN\_1727458 (ER binding) HDAC1|ILMN\_1727458 (ER binding) [<=60] p = 0.9429 No detectable trend: [<=60] p = 0.68679No detectable trend: 16 16 [>60] p = 0.13314 [>60] p = 0.5294|FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.72274[All] p = 0.88354 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10 ω ω 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 HDAC1|ILMN\_1727458 (ER binding) HDAC1|ILMN\_1727458 (ER binding) [<=60] p = 0.36306No detectable trend: [<=60] p = 0.94817No detectable trend: 16 16 [>60] p = 0.93439 [>60] p = 0.071551 |FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [All] p = 0.56546[AII] p = 0.0224884 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 9: N = 146 HDAC1|ILMN\_1727458 (ER binding)

iClust 10: N = 226 HDAC1|ILMN\_1727458 (ER binding)

