iClust 1: N = 140 iClust 2: N = 72 PHF12|ILMN\_1730799 (non-ER binding) PHF12|ILMN\_1730799 (non-ER binding) [<=60] p = 0.0049807 No detectable trend: [<=60] p = 0.93954No detectable trend: 16 16 [>60] p = 0.13205 [>60] p = 0.51434 |FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 5.2133e - 07[AII] p = 0.255874 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 3: N = 294 iClust 4: N = 344 PHF12|ILMN\_1730799 (non-ER binding) PHF12|ILMN\_1730799 (non-ER binding) [<=60] p = 0.77823No detectable trend: [<=60] p = 0.53361No detectable trend: 16 16 [>60] p = 0.53464|FC|<1.25 or adjPval>0.01 [>60] p = 0.19413 |FC|<1.25 or adjPval>0.01 [AII] p = 0.9468[AII] p = 0.067774 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 PHF12|ILMN\_1730799 (non-ER binding) PHF12|ILMN\_1730799 (non-ER binding) [<=60] p = 0.86389No detectable trend: [<=60] p = 0.59142No detectable trend: 16 16 [>60] p = 0.88298[>60] p = 0.33421 |FC|<1.25 or adjPval>0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 0.24053[AII] p = 0.464034 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 PHF12|ILMN\_1730799 (non-ER binding) PHF12|ILMN\_1730799 (non-ER binding) [<=60] p = 0.88137 No detectable trend: [<=60] p = 0.40855No detectable trend: 16 16 [>60] p = 0.12014 |FC|<1.25 or adjPval>0.01 [>60] p = 0.0062695 |FC|<1.25 or adjPval>0.01 [AII] p = 0.087561[AII] p = 0.000937224 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 PHF12|ILMN\_1730799 (non-ER binding)

iClust 10: N = 226 PHF12|ILMN\_1730799 (non-ER binding)

