iClust 1: N = 140 iClust 2: N = 72 TP63|ILMN\_2138801 (ER binding) TP63|ILMN\_2138801 (ER binding) [<=60] p = 0.0056998 No detectable trend: [<=60] p = 0.54496No detectable trend: 16 16 [>60] p = 0.56846[>60] p = 0.12456 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.0019842[AII] p = 0.346544 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9 20 20 40 60 80 100 40 60 80 100 Age at diagnosis Age at diagnosis iClust 3: N = 294 iClust 4: N = 344 TP63|ILMN\_2138801 (ER binding) TP63|ILMN\_2138801 (ER binding) [<=60] p = 0.24571No detectable trend: [<=60] p = 0.074292No detectable trend: 16 16 [>60] p = 0.046234|FC|<4 or adjPval>0.01 [>60] p = 0.0014177 |FC|<4 or adjPval>0.01 [AII] p = 6.4706e - 10[AII] p = 6.4004e - 084 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 TP63|ILMN\_2138801 (ER binding) TP63|ILMN\_2138801 (ER binding) [<=60] p = 0.12657No detectable trend: [<=60] p = 0.10365No detectable trend: 16 16 [>60] p = 0.48645[>60] p = 0.050907|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 1.7787e - 05[AII] p = 0.000904934 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9 20 20 40 60 80 100 40 60 80 100 Age at diagnosis Age at diagnosis iClust 7: N = 193 iClust 8: N = 300 TP63|ILMN\_2138801 (ER binding) TP63|ILMN\_2138801 (ER binding) [<=60] p = 0.036988No detectable trend: [<=60] p = 0.0054351 No detectable trend: 16 16 [>60] p = 0.037612 |FC|<4 or adjPval>0.01 [>60] p = 3.6492e-06 |FC|<4 or adjPval>0.01 [AII] p = 1.3732e - 06[AII] p = 1.5723e-174 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 TP63|ILMN\_2138801 (ER binding)

iClust 10: N = 226 TP63|ILMN\_2138801 (ER binding)

