**PAM50 LumA: N = 721 PAM50 LumB: N = 492** STARD3|ILMN\_1657095 STARD3|ILMN\_1657095 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.36221[<=60] p = 0.15641No detectable trend: No detectable trend: 16 16 [>60] p = 0.08287 [>60] p = 0.52623 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.70724[All] p = 0.843374 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 PAM50 Her2: N = 240**PAM50** Basal: **N** = 331 STARD3|ILMN\_1657095 STARD3|ILMN\_1657095 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.10219No detectable trend: [<=60] p = 0.38391No detectable trend: 16 9 [>60] p = 0.024231 |FC|<4 or adjPval>0.01 [>60] p = 0.39459|FC|<4 or adjPval>0.01 [AII] p = 2.7011e-08[All] p = 0.351384 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10  $\infty$  $\infty$ 9 9

20

40

60

Age at diagnosis

80

100

20

40

60

Age at diagnosis

80

100

PAM50 Normal: N = 202 STARD3|ILMN\_1657095

NKI Tier 1: non-ER binding; Tier 2: ER binding

