**PAM50 LumA: N = 721 PAM50 LumB: N = 492** ER-beta|ILMN\_1740045 ER-beta|ILMN\_1740045 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.6354No detectable trend: [<=60] p = 0.68463No detectable trend: 16 16 [>60] p = 0.25776 |FC|<2 or adjPval>0.01 [>60] p = 0.93598 |FC|<2 or adjPval>0.01 [AII] p = 0.54207[AII] p = 0.428564 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 **PAM50 Basal: N = 331** PAM50 Her2: N = 240ER-beta|ILMN\_1740045 ER-beta|ILMN\_1740045 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.35672No detectable trend: [<=60] p = 0.73234No detectable trend: 16 16 [>60] p = 0.67275 [>60] p = 0.17761 |FC|<2 or adjPval>0.01 |FC|<2 or adjPval>0.01 [AII] p = 0.037846[AII] p = 0.128714 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ω 9 9

20

40

60

Age at diagnosis

80

100

20

40

60

Age at diagnosis

80

100

PAM50 Normal: N = 202 ER-beta|ILMN\_1740045

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

