PAM50 LumA: N = 721 PAM50 LumB: N = 492 RUNX1|ILMN_1801504 RUNX1|ILMN_1801504 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.79243[<=60] p = 0.56437Age-dependent trend: No detectable trend: 16 16 [>60] p = 0.0010434 [>60] p = 0.5157 |FC|>1.25 and adjPval<0.01 |FC|<1.25 or adjPval>0.01 [AII] p = 3.2016e - 07[AII] p = 0.112294 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 10 10 ω ∞ 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 RUNX1|ILMN_1801504 RUNX1|ILMN_1801504 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.81564No detectable trend: [<=60] p = 0.53579No detectable trend: 16 9 [>60] p = 0.21708 |FC|<1.25 or adjPval>0.01 [>60] p = 0.826 |FC|<1.25 or adjPval>0.01 [AII] p = 0.79912[AII] p = 0.706084 4 Raw Expression (4, 16) Raw Expression (4, 16) 12 12 19 10 ω ∞

9

20

40

60

Age at diagnosis

80

100

9

20

40

60

Age at diagnosis

80

100

PAM50 Normal: N = 202 RUNX1|ILMN_1801504

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

