**PAM50 LumA: N = 721** PAM50 LumB: N = 492HIF3alpha|ILMN\_1663015 HIF3alpha|ILMN\_1663015 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.12376 [<=60] p = 0.21359No detectable trend: No detectable trend: 16 16 [>60] p = 0.032988 [>60] p = 0.83152 |FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.009162[AII] p = 0.950764 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 Her2: N = 240 **PAM50 Basal: N = 331** HIF3alpha|ILMN\_1663015 HIF3alpha|ILMN\_1663015 NKI Tier 1: non-ER binding; Tier 2: ER binding NKI Tier 1: non-ER binding; Tier 2: ER binding [<=60] p = 0.30771No detectable trend: [<=60] p = 0.81723No detectable trend: 16 16 [>60] p = 0.85862 [>60] p = 0.94748|FC|<4 or adjPval>0.01 |FC|<4 or adjPval>0.01 [AII] p = 0.51801[AII] p = 0.427254 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 HIF3alpha|ILMN\_1663015

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

