

## Appendix F: Aim 2 Original Model Validation

**Appendix F Table 1. Aggregate Summary Table: Original model validation performance measure**

	Aggregate			ACS			HF			Population		
	Related (n=57)	Distantly related (n=101)	p-value	Related (n=13)	Distantly related (n=15)	p-value	Related (n=7)	Distantly related (n=35)	p-value	Related (n=37)	Distantly related (n=51)*	p-value
<b>% Change in discrimination</b>												
Validation c vs. development c	-30 (-45, -16)	-55 (-68, -40)	<0.001	-19 (-27, -9)	-29 (-44, -15)	0.135	-39 (-86, -16)	-51 (-57, -40)	0.664	-42 (-46, -23)	-67 (-80, -60)	<0.001
MBC vs. development c	-25 (-34, -9)	-29 (-40, -18)	0.098	-14 (-19, -4)	-25 (-30, -18)	0.068	-33 (-38, -6)	-25 (-35, -8)	0.764	-29 (-40, -11)	-38 (-42, -24)	0.193
Validation c vs. MBC	-11 (-25, 0)	-33 (-50, -13)	<0.001	-7 (-19, 6)	-13 (-28, 14)	0.549	-9 (-65, 67)	-31 (-43, 1)	0.500	-16 (-28, -2)	-40 (-68, -24)	<0.001
<b>Calibration</b>												
standardized E	0.5 (0.4, 0.7)	0.5 (0.4, 0.8)	0.500	0.3 (0.2, 0.4)	0.7 (0.4, 0.8)	0.006	0.6 (0.5, 1.1)	0.5 (0.3, 0.7)	0.295	0.6 (0.5, 0.7)	0.5 (0.4, 0.8)	0.830
standardized E90	0.8 (0.7, 1.2)	1.0 (0.6, 1.3)	0.505	0.6 (0.5, 1)	1.2 (1, 1.7)	0.072	1.2 (0.8, 1.8)	0.7 (0.5, 1.2)	0.098	0.8 (0.7, 1.2)	1.1 (1, 1.3)	0.051
<b>Net Benefit (standardized)</b>												
at the prevalence	0.1 (0.03, 0.2)	0.14 (0.03, 0.22)	0.261	0.25 (0.21, 0.29)	0.25 (0.12, 0.3)	0.580	0.08 (0.04, 0.12)	0.14 (0.01, 0.21)	0.303	0.06 (0.02, 0.13)	0.1 (0.02, 0.18)	0.305
% not harmful, % (n)**	26.3% (15/57)	32.7% (33/101)	0.404	69.2% (9/13)	20.0% (3/15)	0.020	42.9% (3/7)	11.4% (4/35)	0.077	8.1% (3/37)	0% (0/25)	0.266

Values in table are median (Q1, Q3) and p-values are based on non-parametric Wilcoxon two-sample tests unless otherwise indicated.

\*26 distantly related validations for Population CPMs are not assessed for calibration

\*\* Values in table are % (n) and p-values are based on chi-square test for aggregate sample and Fisher's Exact tests for stratified analyses.

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