Supplemental Materials for the study:

Improving CHA$_2$DS$_2$-VASc Stratification of Non-Fatal Stroke and Mortality Risk Using the Intermountain Risk Score among Atrial Fibrillation Patients

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Supplemental Table S1. Prediction of stroke/mortality by IMRS and CHA$_2$DS$_2$-VASC in females and males.

| Outcome or Metric	Females		Males	
	CHA$_2$DS$_2$-VASc	IMRS	CHA$_2$DS$_2$-VASc	IMRS
	≥2 vs.<2	≥9 vs. <9	≥2 vs. <2	≥11 vs. <11
n=	3,765 vs. 357	3,126 vs. 996	4,208 vs. 1,747	3,582 vs. 2,373
Stroke or Mortality	44% vs. 4%	48% vs. 6%	44% vs. 9%	47% vs. 9%
Positive Predictive Value	43.7%	48.4%	44.3%	47.3%
Negative Predictive Value	80.8%	66.5%	77.5%	68.6%
Specificity	12.8%	33.7%	38.5%	50.5%
Sensitivity	97.3%	89.5%	87.0%	79.0%
Accuracy	47.5%	56.6%	56.0%	60.7%
	≥3 vs.<3	≥15 vs. <15	≥3 vs. <3	≥17 vs. <17
n=	3,117 vs. 1,005	997 vs. 3,125	2,745 vs. 3,210	791 vs. 5,164
Stroke or Mortality	48% vs. 19%	64% vs. 34%	52% vs. 22%	66% vs. 31%
Positive Predictive Value	48.1%	64.5%	51.8%	65.9%
Negative Predictive Value	87.4%	82.2%	84.1%	81.0%
Specificity	33.4%	85.4%	65.3%	92.9%
Sensitivity	88.6%	38.0%	66.3%	24.3%
Accuracy	56.0%	66.0%	65.7%	68.2%

Supplemental Figure S1. Kaplan-Meier survival curves showing the ability of IMRS to stratify stroke/mortality among females discharged without a prescription for an anticoagulant whose CHA_2DS_2-VASc score was: A1) 1 (p-trend<0.001, IMRS <9: n=143, 9-14: n=47, ≥15: n=3), B1) 2 (p-trend<0.001, IMRS <9: n=140, 9-14: n=128, ≥15: n=20), and C1) >2 (p-trend<0.001, IMRS <9: n=208, 9-14: n=890, ≥15: n=433), and among those with an anticoagulant prescribed whose CHA_2DS_2-VASc score was: A2) 1 (p-trend=0.19, IMRS <9: n=108, 9-14: n=50, ≥15: n=6), B2) 2 (p-trend<0.001, IMRS <9: n=172, 9-14: n=168, ≥15: n=20), and C2) >2 (p-trend<0.001, IMRS <9: n=225, 9-14: n=846, ≥15: n=515). Compare Figure 2. Note that the distribution of patients between those receiving and not receiving a prescription for an anticoagulant are similar in each CHA_2DS_2-VASc category.

**No Anticoagulant**   _**Anticoagulant Prescribed**_
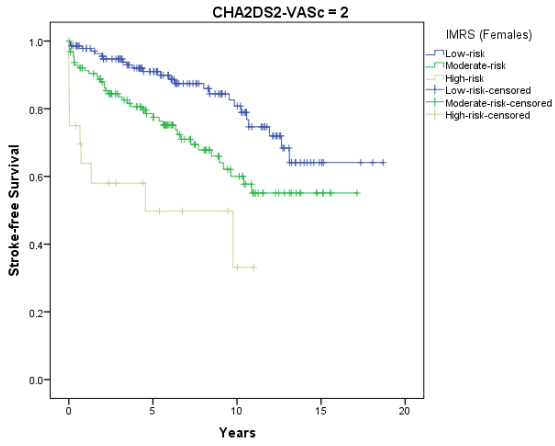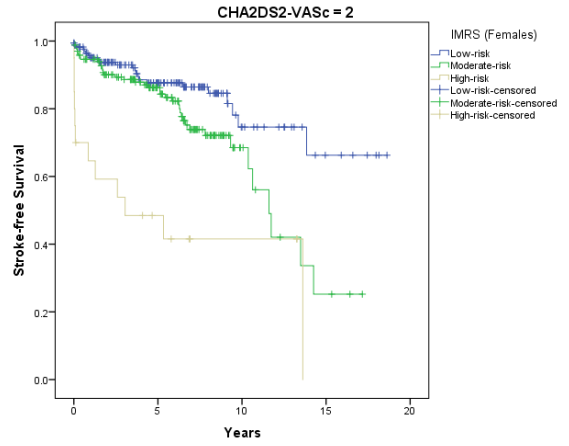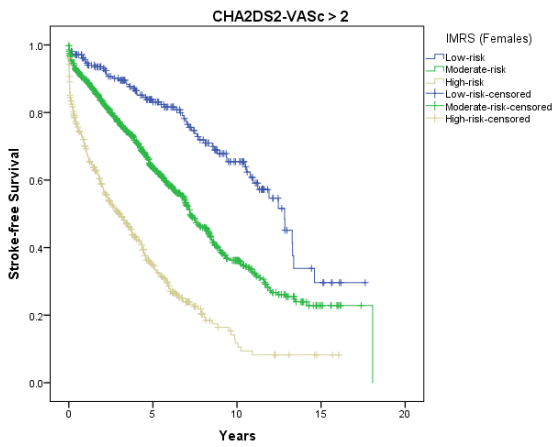
A1)   A2)

No Anticoagulant

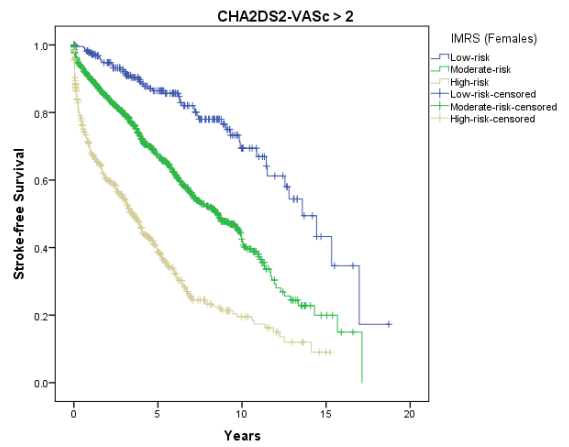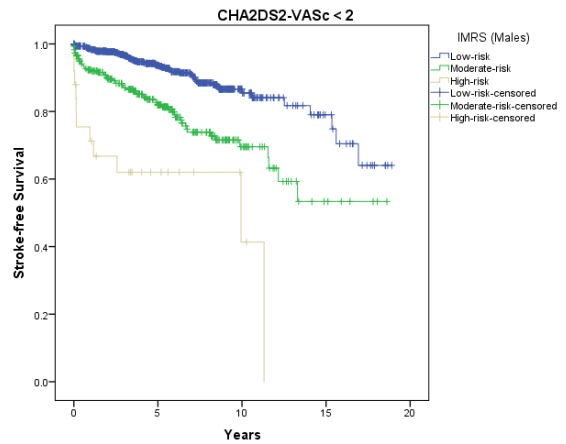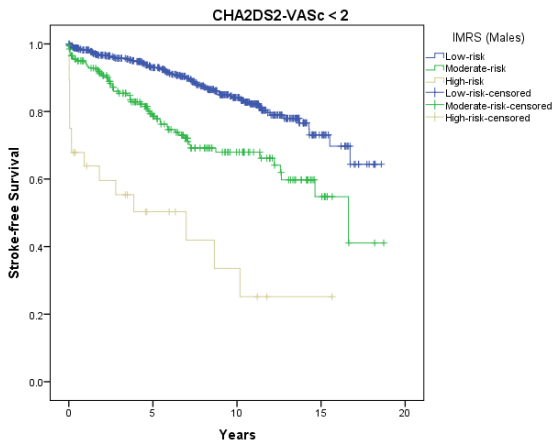**_Anticoagulant Prescribed_**

B1)
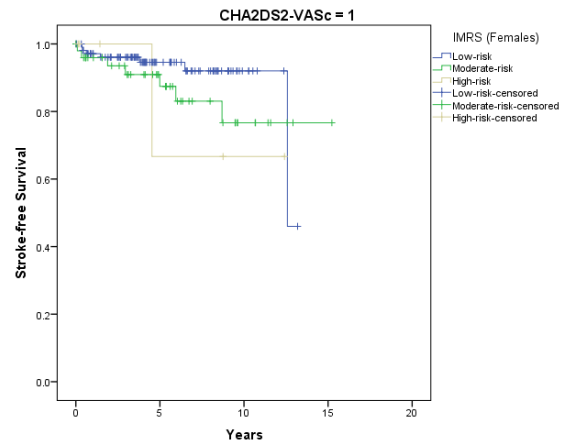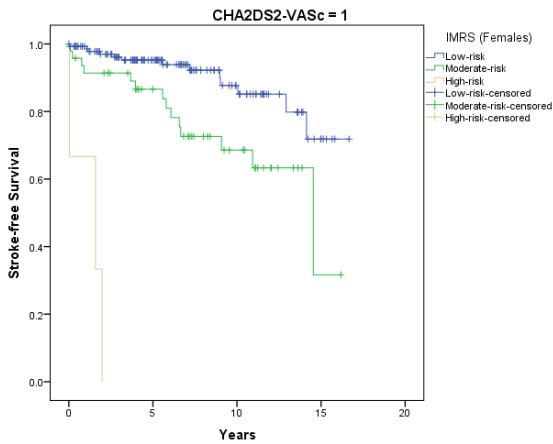
B2)

C1)

C2)

Supplemental Figure S2. Kaplan-Meier survival curves showing the ability of IMRS to stratify stroke/mortality among males discharged without a prescription for an anticoagulant whose CHA_2DS_2-VASc score was: A1) <2 (p-trend<0.001, IMRS <11: n=512, 11-16: n=203, ≥17: n=28), B1) 2 (p-trend<0.001, IMRS <11: n=272, 11-16: n=380, ≥17: n=63), and C1) >2 (p-trend<0.001, IMRS <11: n=319, 11-16: n=800, ≥17: n=342), and among those with an anticoagulant prescribed whose CHA_2DS_2-VASc score was: A2) <2 (p-trend<0.001, IMRS <11: n=682, 11-16: n=297, ≥17: n=25), B2) 2 (p-trend<0.001, IMRS <11: n=322, 11-16: n=361, ≥17: n=65), and C2) >2 (p-trend<0.001, IMRS <11: n=266, 11-16: n=750, ≥17: n=268). Compare Figure 3. Note that the distribution of patients between those receiving and not receiving a prescription for an anticoagulant are similar in each CHA_2DS_2-VASc category.

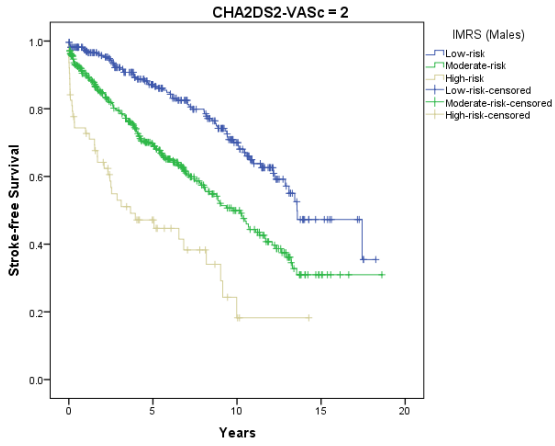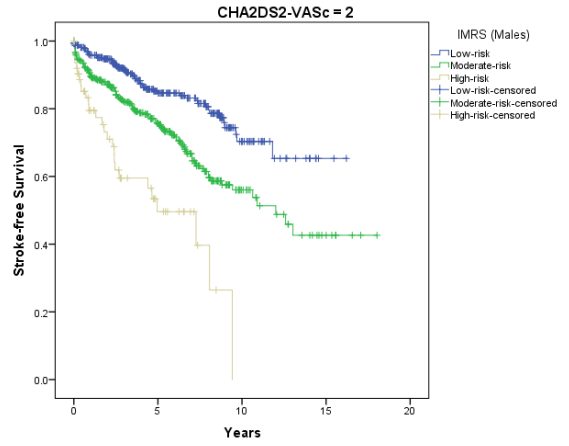*No Anticoagulant*

A1)

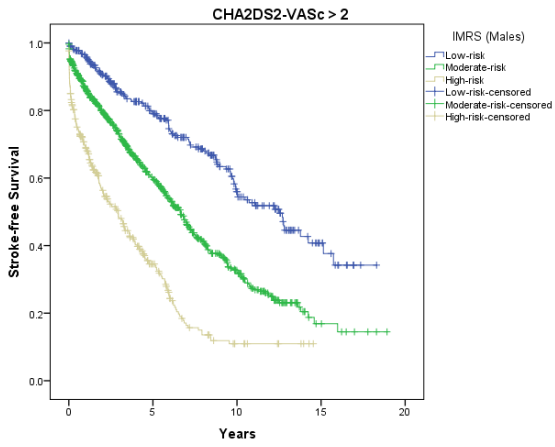*Anticoagulant Prescribed*

A2)

No Anticoagulant

Anticoagulant Prescribed

B1)

B2)

C1)

C2)