**Supplemental Table 1.** Baseline characteristics in the two highest risk vigintiles versus the remainder of the waitlist cohort.

Variable	Everyone Else N=18,580	Top Two Vigintiles	P-Value
		N=2,003	
Demographics			
Age, Mean $\pm$ SD, y	66.36 (10.92)	67.05 (10.16)	0.007
Age, Median (IQR), y	67 (60-74)	67 (60-74)	0.1
Female sex, No. (%)	4,903 (26.4%)	480 (24.0%)	0.02
BMI, Mean $\pm$ SD, kg/m <sup>2</sup>	28.96 (5.51)	28.28 (5.25)	<.0001
BMI, Median (IQR), kg/m <sup>2</sup>	28 (25-32)	28 (25-31)	<.0001
Rural residence, No. (%)	2,841 (15.3%)	255 (12.7%)	0.002
Hospital type, No. (%)			
Community	4,863 (26.2%)	219 (10.9%)	<.0001
Teaching	13,717 (73.8%)	1,784 (89.1%)	
Waitlisted during inpatient			
encounter, No. (%)	93 (0.5%)	1,117 (55.8%)	<.0001
Comorbidities			
Hypertension, No. (%)	15,396 (82.9%)	1,802 (90.0%)	<.0001
Atrial fibrillation, No. (%)	2,110 (11.4%)	391 (19.5%)	<.0001
Recent MI, No. (%)	427 (2.3%)	411 (20.5%)	<.0001
CCS classification, No. (%)			
0	7,068 (38.0%)	186 (9.3%)	<.0001
1	2,716 (14.6%)	329 (16.4%)	
2	4,849 (26.1%)	247 (12.3%)	
3	3,800 (20.5%)	382 (19.1%)	
4	131 (0.7%)	280 (14.0%)	
Low-risk ACS	*11-15	377 (18.8%)	
Intermediate-risk ACS	*1-5	191 (9.5%)	

Appendix 1, as submitted by the authors. Appendix to: Sun LY, Bader Eddeen A, Wijeysundera HC, et al. Derivation and validation of a clinical model to predict death or cardiac hospitalizations while on the cardiac surgery waitlist. *CMAJ* 2021. doi: 10.1503/cmaj.210170. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca.

High-risk ACS	0 (0.0%)	11 (0.5%)	
LM or LM equivalent disease,			
No. (%)	5,345 (28.8%)	1,013 (50.6%)	<.0001
Proximal LAD disease, No. (%)	5,814 (31.3%)	1,004 (50.1%)	<.0001
Previous PCI, No. (%)	1,841 (9.9%)	299 (14.9%)	<.0001
Left ventricular ejection			
fraction, No. (%)			
≥ 50%	14,731 (79.3%)	1,310 (65.4%)	<.0001
35-49%	2,864 (15.4%)	431 (21.5%)	
20-35%	851 (4.6%)	220 (11.0%)	
< 20%	134 (0.7%)	42 (2.1%)	
NYHA classification, No. (%)			
1	10,863 (58.5%)	1,435 (71.6%)	<.0001
2	4,301 (23.1%)	164 (8.2%)	
3	3,278 (17.6%)	269 (13.4%)	
4	138 (0.7%)	135 (6.7%)	
Heart failure, No. (%)	4,161 (22.4%)	754 (37.6%)	<.0001
Moderate-severe mitral			
regurgitation, No. (%)	2,265 (12.2%)	99 (4.9%)	<.0001
Moderate-severe aortic			
regurgitation, No. (%)	769 (4.1%)	30 (1.5%)	<.0001
Severe aortic stenosis, No. (%)	6,240 (33.6%)	336 (16.8%)	<.0001
Endocarditis, No. (%)			
None	18,435 (99.2%)	1,985 (99.1%)	0.01
Acute	35 (0.2%)	10 (0.5%)	
Subacute	110 (0.6%)	8 (0.4%)	
Cerebrovascular disease, No.			
(%)	1,629 (8.8%)	246 (12.3%)	<.0001

Appendix 1, as submitted by the authors. Appendix to: Sun LY, Bader Eddeen A, Wijeysundera HC, et al. Derivation and validation of a clinical model to predict death or cardiac hospitalizations while on the cardiac surgery waitlist. *CMAJ* 2021. doi: 10.1503/cmaj.210170. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca.

Peripheral arterial disease, No.

(%)	2,382 (12.8%)	325 (16.2%)	<.0001
Smoking status, No. (%)			
Never	9,231 (49.7%)	905 (45.2%)	<.0001
Current	2,835 (15.3%)	384 (19.2%)	
Former	6,514 (35.1%)	714 (35.6%)	
COPD, No. (%)	4,001 (21.5%)	514 (25.7%)	<.0001
Diabetes, No. (%)	7,130 (38.4%)	1,012 (50.5%)	<.0001
Dyslipidemia, No. (%)	12,335 (66.4%)	1,435 (71.6%)	<.0001
GFR, Mean $\pm$ SD,			
$mL/min/1.73m^2$	86.36 (33.75)	80.16 (33.84)	<.0001
GFR, Median (IQR),			
$mL/min/1.73m^2$	82 (63-105)	76 (57-99)	<.0001
Dialysis, No. (%)	305 (1.6%)	68 (3.4%)	<.0001
Anemia, No. (%)	654 (3.5%)	156 (7.8%)	<.0001
Liver disease, No. (%)	162 (0.9%)	28 (1.4%)	0.02
Alcohol abuse, No. (%)	138 (0.7%)	27 (1.3%)	0.004
Dementia, No. (%)	221 (1.2%)	25 (1.2%)	0.8
Depression, No. (%)	118 (0.6%)	24 (1.2%)	0.004
Psychosis, No. (%)	19 (0.1%)	*1-5	0.5
Primary cancer, No. (%)	872 (4.7%)	116 (5.8%)	0.03
Metastatic cancer, No. (%)	110 (0.6%)	8 (0.4%)	0.3
Operative characteristics			
Surgery type, No. (%)			
CABG	9,089 (48.9%)	1,579 (78.8%)	<.0001
Valve	6,152 (33.1%)	*208-212	
CABG + Valve	2,497 (13.4%)	211 (10.5%)	
Thoracic Aorta	842 (4.5%)	*1-5	
Redo-Sternotomy, No. (%)	674 (3.6%)	70 (3.5%)	0.8

Appendix 1, as submitted by the authors. Appendix to: Sun LY, Bader Eddeen A, Wijeysundera HC, et al. Derivation and validation of a clinical model to predict death or cardiac hospitalizations while on the cardiac surgery waitlist. *CMAJ* 2021. doi: 10.1503/cmaj.210170. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca.

Cardiogenic Shock, No. (%)	10 (0.1%)	*1-5	0.4
Operative priority, No. (%)			
Urgent	6,462 (34.8%)	561 (28.0%)	<.0001
Semi-urgent	3,164 (17.0%)	789 (39.4%)	
Elective	8,954 (48.2%)	653 (32.6%)	
Recommend maximum wait			
time, Mean $\pm$ SD, d	44.37 (34.88)	37.09 (27.54)	<.0001
Recommend maximum wait			
time, Median (IQR), d	42 (14-73)	31 (14-55)	<.0001
Adherence to recommended			
wait time**, No. (%)	9,565 (51.5%)	1,327 (66.3%)	<.0001

<sup>\*</sup> Data suppressed due to small counts.

Abbreviations: SD = standard deviation; IQR = interquartile range; BMI = body mass index; MI = myocardial infarction; CCS = Canadian Cardiovascular Society; ACS = acute coronary syndrome; LM = left main; LAD = left anterior descending; PCI = percutaneous coronary intervention; LVEF = left ventricular ejection fraction; NYHA = New York Heart Association; COPD = chronic obstructive pulmonary disease; GFR = glomerular filtration rate; CABG = coronary artery bypass grafting

## REFERENCES

1. Canadian Cardiovascular Society Access to Care Working Group. Wait-time benchmarks for cardiovascular services and procedures. It's about time: Achieving benchmarks and best practices in wait time management. Final report by the Wait Time Alliance for Timely Access to Health Care [Internet]. 2005 April 17, 2021:[68-87 pp.]. Available from: <a href="https://www.waittimealliance.ca/wp-content/uploads/2014/05/Cardiovasuclar Services">https://www.waittimealliance.ca/wp-content/uploads/2014/05/Cardiovasuclar Services and Procedures.pdf</a>.

<sup>\*\*</sup> Adherence is defined as adhering to procedure-specific wait times recommended by the Canadian Cardiovascular Society Access to Care Working Group (1).

