

# **SUPPLEMENTAL MATERIAL**

**Table S1. International Classification of Disease, 10th edition, Clinical Modification**

**(ICD-10-CM) Codes Used for Comorbidities and Complications.**

---

<b>Comorbidities/Complications</b>	<b>ICD-10-CM Code</b>
Acute pericarditis	I30, I312-I314, I318, I319, I32
COVID-19	U071
<b>Comorbidities</b>	
Smoking	F17-F17299, Z720, Z87891
Hypertension	I10, I15-I159
Diabetes mellitus	E10-E109, E11-E119, E13-E139
Hyperlipidemia	E780-E785
Obesity	Z683-Z6839, Z684-Z6845, E66-E669
Anxiety	F064, F40-F409, F41-F419
Depression	F32-F329, F33-F339, F341
OSA	G473-G4739
CKD	N18-N189
COPD	J41-J418, J42, J43-J439, J44-J449
Anemia	D50-D59, D60-D64
Cancer	C00-C969, D00-D099
SLE	M32
Rheumatoid arthritis	M05, M06

---

---

Systemic sclerosis	M34
Sjögren’s syndrome	M35.0
IBD	K50, K51
<b>Complications</b>	
Cardiac arrest	I46-I469
Cardiogenic shock	R570
Ventricular arrhythmia	I472, I490-I4902
Acute kidney injury	N17-N179
Acute respiratory failure	J960-J9622
ACHF	I5021, I5031, I5041, I5023, I5033, I5043
Cardiac tamponade	I319

---

ACHF, acute congestive heart failure; CKD, chronic kidney disease; COPD, chronic obstructive pulmonary disease; COVID-19, Coronavirus disease 2019; IBD, inflammatory bowel disease; ICD-10-CM codes: International Classification of Diseases, 10th edition, Clinical Modification codes; OSA, obstructive sleep apnea; SLE, systemic lupus erythematosus

**Table S2. Baseline Characteristics.**

Variables	Unmatched Cohort			Propensity-Matched Cohort		
	Acute Pericarditis without COVID-19	Acute Pericarditis with COVID-19	<i>P</i> Value	Acute Pericarditis without COVID-19	Acute Pericarditis with COVID-19	<i>P</i> Value
<b>n</b>	45,053	1,860		5,554	1,856	
<b>Age, (mean (SD))</b>	61.52 (19.37)	59.15 (19.42)	<0.001	59.18 (20.82)	59.17 (19.43)	0.99
<b>Sex, n (%)</b>			0.01			0.86
Male	22,092 (49.0)	980 (52.7)		2,939 (52.9)	977 (52.6)	
Female	22,956 (51.0)	880 (47.3)		2,615 (47.1)	879 (47.4)	
Unknown	5 (0.0)	0 (0.0)		0 (0.0)	0 (0.0)	
<b>Race, n (%)</b>			<0.001			0.99
White	27,694 (61.5)	768 (41.3)		2,283 (41.1)	768 (41.4)	
African American	8,602 (19.1)	500 (26.9)		1,494 (26.9)	499 (26.9)	
Hispanic	4,662 (10.3)	383 (20.6)		1,155 (20.8)	380 (20.5)	
Asian/ Pacific Islander	1,328 (2.9)	59 (3.2)		186 (3.3)	59 (3.2)	
Native American	242 (0.5)	11 (0.6)		36 (0.6)	11 (0.6)	
Other	1,416 (3.1)	87 (4.7)		261 (4.7)	87 (4.7)	
Unknown	1,109 (2.5)	52 (2.8)		139 (2.5)	52 (2.8)	
<b>Patient location, n (%)</b>			<0.001			0.99
"Central" counties of metro areas of >=1 million population	14,139 (31.4)	720 (38.7)		2,184 (39.3)	716 (38.6)	
"Fringe" counties of metro areas of >=1 million population	11,455 (25.4)	433 (23.3)		1,292 (23.3)	433 (23.3)	

Counties in metro areas of 250,000-999,999 population	8,973 (19.9)	334 (18.0)		967 (17.4)	334 (18.0)	
Counties in metro areas of 50,000-249,999 population	3,832 (8.5)	137 (7.4)		411 (7.4)	137 (7.4)	
Micropolitan counties	3,729 (8.3)	118 (6.3)		353 (6.4)	118 (6.4)	
Non-metropolitan or micropolitan counties	2,684 (6.0)	104 (5.6)		298 (5.4)	104 (5.6)	
NA	241 (0.5)	14 (0.8)		49 (0.9)	14 (0.8)	
<b>Mean household income, n (%)</b>			<0.001			0.98
\$1-\$42,999	13,393 (29.7)	642 (34.5)		1,910 (34.4)	640 (34.5)	
\$43,000-\$53,999	11,706 (26.0)	504 (27.1)		1,508 (27.2)	504 (27.2)	
\$54,000-\$70,999	10,036 (22.3)	386 (20.8)		1,163 (20.9)	384 (20.7)	
\$71,000 or more	9,164 (20.3)	299 (16.1)		875 (15.8)	299 (16.1)	
Unknown	754 (1.7)	29 (1.6)		98 (1.8)	29 (1.6)	
<b>Primary payer, n (%)</b>			<0.001			0.99
Medicare	24,424 (54.2)	908 (48.8)		2,717 (48.9)	908 (48.9)	
Medicaid	6,916 (15.4)	333 (17.9)		1,023 (18.4)	333 (17.9)	
Private including HMO	10,766 (23.9)	455 (24.5)		1,318 (23.7)	455 (24.5)	
Self-pay	1,626 (3.6)	64 (3.4)		200 (3.6)	64 (3.4)	
No charge	140 (0.3)	10 (0.5)		33 (0.6)	10 (0.5)	
Other	1,126 (2.5)	82 (4.4)		240 (4.3)	80 (4.3)	
Unknown	55 (0.1)	8 (0.4)		23 (0.4)	6 (0.3)	
<b>Hospital type, n (%)</b>			0.68			0.81

Rural	2,121 (4.7)	84 (4.5)		232 (4.2)	84 (4.5)	
Urban non-teaching	6,380 (14.2)	276 (14.8)		831 (15.0)	275 (14.8)	
Urban teaching	36,552 (81.1)	1,500 (80.6)		4,491 (80.9)	1,497 (80.7)	
<b>Hospital Region, n (%)</b>			0.36			0.98
Northeast	8,459 (18.8)	366 (19.7)		1,105 (19.9)	365 (19.7)	
Midwest	9,758 (21.7)	402 (21.6)		1,193 (21.5)	401 (21.6)	
South	18,118 (40.2)	761 (40.9)		2,247 (40.5)	759 (40.9)	
West	8,718 (19.4)	331 (17.8)		1,009 (18.2)	331 (17.8)	
<b>Hospital Bed Size, n (%)</b>			0.43			0.93
Small	8,187 (18.2)	360 (19.4)		1,064 (19.2)	358 (19.3)	
Medium	11,927 (26.5)	485 (26.1)		1,432 (25.8)	485 (26.1)	
Large	24,939 (55.4)	1,015 (54.6)		3,058 (55.1)	1,013 (54.6)	
<b>Comorbidities, n (%)</b>						
Smoking	16,270 (36.1)	431 (23.2)	<0.001	1,349 (24.3)	431 (23.2)	0.37
Hypertension	10,226 (22.7)	422 (22.7)	1.00	1,231 (22.2)	418 (22.5)	0.77
Diabetes mellitus	14,502 (32.2)	741 (39.8)	<0.001	2,164 (39.0)	738 (39.8)	0.56
Hyperlipidemia	19,547 (43.4)	692 (37.2)	<0.001	2,048 (36.9)	691 (37.2)	0.81
Obesity	9,039 (20.1)	448 (24.1)	<0.001	1,313 (23.6)	447 (24.1)	0.72
Anxiety	6,576 (14.6)	203 (10.9)	<0.001	619 (11.1)	201 (10.8)	0.74
Depression	5,318 (11.8)	165 (8.9)	<0.001	501 (9.0)	165 (8.9)	0.90
OSA	4,896 (10.9)	148 (8.0)	<0.001	460 (8.3)	148 (8.0)	0.71
Chronic kidney disease	14,239 (31.6)	567 (30.5)	0.32	1,666 (30.0)	567 (30.5)	0.67
COPD	9,020 (20.0)	267 (14.4)	<0.001	824 (14.8)	267 (14.4)	0.66
Anemia	21,179 (47.0)	813 (43.7)	0.01	2,404 (43.3)	812 (43.8)	0.75
Cancer	8,293 (18.4)	148 (8.0)	<0.001	448 (8.1)	148 (8.0)	0.94
SLE	1,072 (2.4)	36 (1.9)	0.25	95 (1.7)	36 (1.9)	0.58

Rheumatoid arthritis	1,199 (2.7)	40 (2.2)	0.20	108 (1.9)	40 (2.2)	0.64
Systemic sclerosis	300 (0.7)	7 (0.4)	0.17	20 (0.4)	7 (0.4)	1
Sjogren's syndrome	189 (0.4)	2 (0.1)	0.059	9 (0.2)	2 (0.1)	0.86
IBD	394 (0.9)	10 (0.5)	0.16	20 (0.4)	10 (0.5)	0.40

---

COPD, chronic obstructive pulmonary disease; COVID-19: Coronavirus disease 2019; HMO, health maintenance organization; IBD, inflammatory bowel disease; NA, not available; OSA, obstructive sleep apnea; SD, standard deviation; SLE, systemic lupus erythematosus

**Table S3. In-Hospital Outcomes.**

Variables	Unmatched Cohort			Propensity-Matched Cohort		
	Acute Pericarditis without COVID-19	Acute Pericarditis with COVID-19	<i>P</i> Value	Acute Pericarditis without COVID-19	Acute Pericarditis with COVID-19	<i>P</i> Value
<b>n</b>	45,053	1,860		5,554	1,856	
<b>Outcomes</b>						
Death, n (%)	3,298 (7.3)	439 (23.6)	<0.001	418 (7.5)	439 (23.7)	<0.001
Cardiac arrest, n (%)	1,352 (3.0)	110 (5.9)	<0.001	212 (3.8)	110 (5.9)	<0.001
Cardiogenic shock, n (%)	2,383 (5.3)	108 (5.8)	0.36	330 (5.9)	107 (5.8)	0.82
Ventricular arrhythmia, n (%)	2,617 (5.8)	119 (6.4)	0.31	372 (6.7)	119 (6.4)	0.71
AKI, n (%)	1,4513 (32.2)	795 (42.7)	<0.001	1,822 (32.8)	794 (42.8)	<0.001
ARF, n (%)	12,681 (28.1)	947 (50.9)	<0.001	1,517 (27.3)	946 (51.0)	<0.001
ACHF, n (%)	11,221 (24.9)	308 (16.6)	<0.001	1,469 (26.4)	308 (16.6)	<0.001
Cardiac tamponade	4,622 (10.3)	81 (4.4)	<0.001	556 (10.0)	81 (4.4)	<0.001
LOS (days)						
Median (IQR)	5.00 (7.00)	8.00 (12.00)	<0.001	5.00 (7.00)	8.00 (12.00)	<0.001
Mean (SD)	8.91 (13.78)	13.19 (14.76)	<0.001	9.20 (14.45)	13.13 (14.63)	<0.001
Total charge (\$)						
Median (IQR)	70,949 (121,748)	94,761 (175,746)	<0.001	71,786 (127,005)	93,998 (174,178)	<0.001
Mean (SD)	157,032 (318,074)	207,620 (354,098)	<0.001	168,917 (332,264)	206,734 (353,520)	<0.001

ACHF, acute congestive heart failure; AKI, acute kidney injury; ARF, acute respiratory failure; COVID-19: Coronavirus disease 2019; IQR, interquartile range; LOS, length of stay; SD, standard deviation.