Supplemental Table 1: Logistic regression models for ICU Mortality

	Odds Ratio Estimate	95% C.I.	P-value	
Unadjusted				
Non-CKD	Ref			
Non-dialysis CKD	1.36	(0.94-1.99)	0.109	
ESRD	1.00	(0.49-2.08)	0.989	
Fully adjusted				
Non-CKD	Ref			
Non-dialysis CKD	1.22	(0.79-1.91)	0.371	
ESRD	1.40	(0.60-3.28)	0.438	

Fully adjusted includes: : age, sex, race / ethnicity, smoking status, obesity, coronary artery disease, heart failure, hyperlipidemia, hypertension, diabetes, pulmonary, cancer oxygen saturation, temperature, systolic blood pressure, D-dimer, week of admission

Supplemental Table 2: Logistic regression models for ESRD vs non-dialysis CKD (reference)*

	Odds Ratio Estimate	95% C.I.	P-value	
Overall mortality				
Unadjusted	0.73	(0.47-1.10)	0.138	
Fully adjusted	0.57	(0.33-0.95)	0.034	
ICU Admission				
Unadjusted	1.06	(0.68-1.64)	0.780	
Fully adjusted	0.76	(0.43-1.30)	0.319	
ICU Mortality				
Unadjusted	0.56	(0.28-1.10)	0.092	
Fully adjusted	0.47	(0.17-1.24)	0.133	

Fully adjusted includes: : age, sex, race / ethnicity, smoking status, obesity, coronary artery disease, heart failure, hyperlipidemia, hypertension, diabetes, pulmonary, cancer oxygen saturation, temperature, systolic blood pressure, D-dimer, week of admission

^{*}Models restricted to non-dialysis CKD and ESRD patients only

Supplemental Table 3: Codes used to define principal diagnosis of COVID-19, sepsis, or respiratory disease

ICD-10 code	Description
J21.9	'Acute bronchiolitis, unspecified'
J80	'Acute respiratory distress syndrome'
J96.01	'Acute respiratory failure with hypoxia'
J06.9	'Acute upper respiratory infection, unspecified'
U07.1	'COVID-19'
J44.1	'Chronic obstructive pulmonary disease with (acute) exacerbation'
R05	'Cough'
O99.52	'Diseases of the respiratory system complicating childbirth'
099.512	'Diseases of the respiratory system complicating pregnancy, second trimester'
J45.41	'Moderate persistent asthma with (acute) exacerbation'
B97.29	'Other coronavirus as the cause of diseases classified elsewhere'
J98.8	'Other specified respiratory disorders'
A41.89	'Other specified sepsis'
J12.89	'Other viral pneumonia'
J12.81	'Pneumonia due to SARS-associated coronavirus'
J18.9	'Pneumonia, unspecified organism'
R09.2	'Respiratory arrest'
J96.91	'Respiratory failure, unspecified with hypoxia'
A41.9	'Sepsis, unspecified organism'
R06.02	'Shortness of breath'
J22	'Unspecified acute lower respiratory infection'
J12.9	'Viral pneumonia, unspecified'