

**Supplementary Table 1:** The HD-related data and laboratory analyses at first and third months after diagnosing COVID-19 data. All data in the non-COVID group were obtained at the same month with the COVID-19 patient in the non-COVID group.

		<b>COVID-19 Group N: 636</b>	<b>Non-COVID Group N: 587</b>	<b>Total N: 1223</b>
<b>HD-related information (before Covid-19)</b>				
HD duration (month), median (IQR)		48(24-96)	53(24-96)	48(24-96)
Vascular access, n(%)	A-V fistula	488(76.9)	487(82.8)	975(79.7) *
	A-V graft	11(1.7)	9(1.5)	20(1.6)
	Non-tunneled catheter	7(1.1)	3(0.5)	10(0.8)
	Tunneled-permanent catheter	129(20.3)	89(15.1)	218(17.8) *
The duration of use of this last vascular access (month), median (IQR)		36(15-62)	36(16-72)	36(16-71)
Previous vascular access procedures, n(%)	A-V fistula or graft created 1-2 times	198(31.2)	175(29.8)	373(30.5)
	Three and more A-V fistulas or grafts created	34(5.4)	25(4.3)	59(4.8)
	Using the first vascular access	327(51.5)	332(56.5)	659(53.9)
	Never been created. Using an HD catheter.	76(12.0)	56(9.5)	132(10.8)
Predialysis weight (kg), median (IQR)		71(62-81)	69(60-80)	70(60-80)
Residual urine volume (ml/day), median (IQR)		0(0-0)	0(0-100)	0(0-0)
Predialysis systolic blood pressure (mmHg), median (IQR)		130(120-145)	130(120-140)	130(120-140)
Predialysis diastolic blood pressure (mmHg), median (IQR)		80(70-83)	80(70-80)	80(70-80)
HD duration (min/session), median (IQR)		240(240-240)	240(240-240)	240(240-240)
UF volume (L/session), median (IQR)		3(2-4)	2.95(2-4)	3(2-4)
Ven Pressure (mm/H2O), median (IQR)		135(100-160)	130(110-160)	134(100-160)
Pump speed (ml/min), median (IQR)		300(300-350)	300(300-350)	300(300-350)
Kt/V, median (IQR)		1.56(1.40-1.75)	1.60(1.40-1.80)	1.6(1.40-1.80)*
Urea reduction rate, median (IQR)		72(68-77)	74(68-78)	73(68-78)
Dialyzer surface area (m2), median (IQR)		1.7(1.6-1.8)	1.8(1.7-1.8)	1.7(1.6-1.8)*

Weekly ESA amount (U/kg), median (IQR)		88(0-150)	80(0-150)	83.75(0-150)
Anticoagulation, median (IQR)	Anticoagulation-free dialysis	15(2.4)	11(1.9)	26(2.1)
	Standard heparin	381(60.0)	406(69.1)	787(64.4)*
	Low molecular weight heparin	237(37.3)	170(28.9)	407(33.3)*
	Other	2(0.3)	1(0.2)	3(0.2)
<b><u>28th Day Data (After Covid-19), median (IQR)</u></b>				
Predialysis weight (kg)		70(63-81)	68.5(59-80)	70(61-80)
Predialysis systolic blood pressure (mmHg)		130(120-146)	130(120-142)	130(120-145)
Predialysis diastolic blood pressure (mmHg)		80(70-80)	80(70-80)	80(70-80)
HD Time (min/session)		240(240-240)	240(240-240)	240(240-240)
UF volume (L/session)		3(2-4)	3(2-4)	3(2-4)
Ven Pressure (mm/H2O)		130(110-165)	135(110-160)	131.5(110-162)*
Pump speed (ml/min)		300(300-350)	300(300-350)	300(300-350)
Kt/V		1.55(1-2)	1.6(1-2)	1.6(1-2)
URR (%)		72(67-77)	73(67-78)	73(67-78)
Residual urine (ml/day)		0(0-0)	0(0-0)	0(0-0)
Dialyzer surface area (m2)		1.7(2-2)	1.8(2-2)	1.7(2-2)
Weekly ESA amount (U/kg)		120(0-150)	75(0-150)	100(0-150)*
<b><u>28th Day Data (After Covid-19), median (IQR)</u></b>				
Creatinine (mg/dl)		7.1(6-9)	7.9(6-10)	7.5(6-9)*
Potassium (mmol/L)		4.9(4-5)	5.1(5-6)	5(5-6)*
Calcium (mg/dl)		8.5(8-9)	8.6(8-9)	8.6(8-9)*
Phosphorus (mg/dl)		4.8(4-6)	4.83(4-6)	4.8(4-6)
Parathyroid hormone (pg/mL)		342(198-600)	365(207-659)	352(200-613)
ALT (U/L)		12(8-18)	11(8-15)	12(8-17)*
Album (g/dl)		3.625(3-4)	3.8(4-4)	3.73(3-4)*
Ferritin (ng/ml)		651.5(357-1026)	505(307-750)	566(328-876)*
CRP (mg/l)		10.35(4-26)	3.4(2-12)	6.82(2-18)*
Hemoglobin (g/dl)		10.1(9-11)	11(10-12)	10.6(9-12)*
Leukocyte(/mm3)		6390(4960-7950)	6200(4600-7800)	6300(4815-7850)*
Number of neutrophils (/mm3)		3810(2612-5348)	3910(2770-5040)	3880(2700-5130)
Number of lymphocytes (/mm3)		1140(730-1600)	1300(760-1800)	1220(730-1700)

<b>90<sup>th</sup>-day Data</b> †		<b>N:616</b>	<b>N:588</b>	<b>N:1204</b>
Data regarding HD Procedure				
Predialysis weight (kg)		70(61.8-81.0)	68.5(59.0-79.5)	70(60.0-80.0)
Predialysis systolic blood pressure (mmHg)		135(120-143)	130(120-140)	130(120-142)
Predialysis diastolic blood pressure (mmHg)		80(70-82)	80(70-80)	80(70.0-80)
HD Time (min/session)		240(240-240)	240(240-240)	240(240-240)
UF volume (L/session)		3(2.0-3.5)	3(2.0-3.5)	3(2.0-3.5)
Veous Pressure (mm/H2O)		140(116-170)	138(118-160)	139(118-166)
Pump speed (ml/min)		300(300-350)	300(300-350)	300(300-350)
Kt/V		1.565(1.4-1.8)	1.6(1.4-1.8)	1.6(1.4-1.8)
URR		72(67.0-78.0)	74(68.0-78.0)	73(68.0-78.0)
Residual urine (ml/day)		0(0.0-0)	0(0.0-0)	0(0.0-0)
Dialyzer surface area (m2)		1.7(1.6-1.8)	1.8(1.7-1.8)	1.7(1.6-1.8)*
ESA dosage (IU/week)		91(0.0-150.0)	75(0.0-150.0)	75(0.0-150.0)
Anticoagulation application	Anticoagulation-free dialysis	14(2.3)	12(2.0)	26(2.2)
	Standard heparin	367(59.6)	417(70.9)	784(65.1)*
	Low molecular weight heparin	231(37.5)	157(26.7)	388(32.2)*
	Other anticoagulants	4(0.6)	2(0.3)	6(0.5)
Predialysis Lab Analyses				
Creatinine (mg/dl)		7.2(5.8-8.8)	7.9(6.3-9.5)	7.5(6.0-9.2)
Potassium (mmol/L)		5(4.6-5.5)	5(4.6-5.6)	5(4.6-5.5)
Calcium (mg/dl)		8.7(8.1-9.2)	8.655(8.1-9.1)	8.7(8.1-9.1)
Phosphorus (mg/dl)		5(4.0-5.9)	4.97(4.0-5.9)	5(4.0-5.9)
Parathormone (pg/mL)		324(177-564)	388(215.0-651)	354(196-600)*
ALT (U/L)		11(8.0-17.0)	10(7.6-15.0)	11(8.0-16.0)
Albumin (g/dl)		3.8(3.5-4.0)	3.8(3.6-4.0)	3.8(3.6-4.0)
Ferritin (ng/ml)		526(280-888)	476(292-762)	500(288-804)*
CRP (mg/l)		7(3.0-16.0)	4(1.8-11.9)	5.14(2.0-13.5)*
Hemoglobin (g/dl)		11(10.1-12.0)	11.2(10.2-12.0)	11.1(10.1-12.0)
Leukocyte(/mm3)		6405(5055-8017)	6335(4840-7715)	6400(4980-7890)*
Neutrophils (/mm3)		3800(2740.0-5110)	3900(2790.0-4950.0)	3835(2769.0-5010.0)
Lymphocytes (/mm3)		1293(860-1800)	1310(800-1800)	1300(830-1800)

Abbreviations: HD: hemodialysis , A-V: Arteriovenous, UF: Ultrafiltration, URR: Urea reduction ratio, ESA: Erythropoiesis stimulating agents, ALT: Alanine Aminotransferase, CRP: C reactive protein, ADPKD: Autosomal dominant polycystic kidney.

\*p<0.05

**Supplementary Table 2:** Characteristics of survivor and non-survivor patients on the 90<sup>th</sup> day and differences between the groups.

		<b>Non-survivor N:38 (3.1%)</b>	<b>Survivor N:1185 (96.9%)</b>	<b>Total N:1223</b>
<b>Comorbidities</b>				
Diabetes mellitus		19(4.0)	453(96.0)	472(100)
Hypertension		30(3.2)	914(96.8)	944(100)
COPD		5(3.7)	131(96.3)	136(100)
Cardiac disease		17(3.6)	450(96.4)	467(100)
Cerebrovascular disease		2(3.7)	52(96.3)	54(100)
Malignancy		2(5.1)	37(94.9)	39(100)
Chronic liver disease		1(2.6)	37(97.4)	38(100)
Autoimmune/auto-inflammatory disease		1(2.5)	39(97.5)	40(100)
A-V fistula thrombosis history		5(3.7)	130(96.3)	135(100)
<b>Medications</b>				
ACE inhibitor	No	32(3.4)	921(96.6)	953(100)
	Yes	5(2.2)	224(97.8)	229(100)
ARB	No	34(3.2)	1040(96.8)	1074(100)
	Yes	3(2.8)	104(97.2)	107(100)
Calcium channel blockers	No	21(3.1)	651(96.9)	672(100)
	Yes	16(3.1)	497(96.9)	513(100)
Beta-blocker	No	20(3.0)	648(97.0)	668(100)
	Yes	17(3.3)	499(96.7)	516(100)
Other antihypertensives	No	30(3.3)	887(96.7)	917(100)
	Yes	6(2.3)	252(97.7)	258(100)
Insulin	No	20(2.3)	839(97.7)	859(100)*
	Yes	18(5.3)	319(94.7)	337(100)*
Oral antidiabetic	No	35(3.2)	1074(96.8)	1109(100)
	Yes	3(3.8)	76(96.2)	79(100)
Statins	No	30(3.1)	933(96.9)	963(100)
	Yes	6(2.8)	212(97.2)	218(100)
Antiaggregant	No	15(2.7)	534(97.3)	549(100)

	Yes	21(3.4)	605(96.6)	626(100)
Anticoagulant	No	29(3.1)	894(96.9)	923(100)
	Yes	7(2.7)	251(97.3)	258(100)
ESA	No	7(2.4)	289(97.6)	296(100)
	Yes	30(3.4)	858(96.6)	888(100)
Iv iron	No	12(2.8)	417(97.2)	429(100)
	Yes	25(3.3)	728(96.7)	753(100)
Vitamin D or an analog	No	17(3.3)	506(96.7)	523(100)
	Yes	20(3.0)	644(97.0)	664(100)
Calcium containing phosphorus binder	No	12(3.3)	348(96.7)	360(100)
	Yes	24(2.9)	802(97.1)	826(100)
Lanthanum	No	33(3.0)	1051(97.0)	1084(100)
	Yes	2(2.7)	72(97.3)	74(100)
Cinacalcet	No	27(2.7)	970(97.3)	997(100)
	Yes	9(5.6)	152(94.4)	161(100)*
<b>Smoking status</b>	Never smoked	16(2.4)	651(97.6)	667(100)
	Still smoking	8(5.3)	142(94.7)	150(100)*
	Quited smoking	9(2.6)	336(97.4)	345(100)
<b>HD information</b>				
Vascular access	A-V fistula	22(2.3)	953(97.7)	975(100)*
	A-V graft	1(5.0)	19(95.0)	20(100)
	Catheter (Transient)	0(0.0)	10(100)	10(100)
	Catheter (tunneled-permanent)	15(6.9)	203(93.1)	218(100)*
Duration of current vascular access (month)		24.5(18-48)	36(16-72)	36(16-71)
Number of sessions during active Covid-19		6(4-10)	6(5-8)	6(5-8)
<b>Symptoms</b>				
Fever	No	10(4.9)	193(95.1)	203(100)
	Yes	24(5.8)	390(94.2)	414(100)
Dyspnea	No	10(2.9)	340(97.1)	350(100)*
	Yes	24(9.0)	244(91.0)	268(100)*
Cough	No	7(3.1)	220(96.9)	227(100)*
	Yes	27(6.9)	364(93.1)	391(100)*

Diarrhea	No	28(5.4)	489(94.6)	517(100)
	Yes	4(4.5)	84(95.5)	88(100)
Loss of smell	No	28(5.5)	477(94.5)	505(100)
	Yes	4(4.2)	92(95.8)	96(100)
Loss of taste	No	26(5.3)	461(94.7)	487(100)
	Yes	6(5.4)	105(94.6)	111(100)
Pneumonia on chest CT	No	3(2.3)	130(97.7)	133(100)
	Yes	27(6.3)	404(93.7)	431(100)
Clinical Severity of Covid-19 at Presentation	Asymptomatic disease	4(5.1)	74(94.9)	78(100)
	Mild disease	9(2.7)	327(97.3)	336(100)*
	Moderate-to-severe disease	13(6.4)	189(93.6)	202(100)
	Serious-life threatening disease	8(40.0)	12(60.0)	20(100)*
<b>Treatments for COVID-19</b>				
Hydroxychloroquine	No	20(4.4)	433(95.6)	453(100)
	Yes	10(7.5)	124(92.5)	134(100)
Oseltamivir	No	27(4.9)	523(95.1)	550(100)
	Yes	3(9.1)	30(90.9)	33(100)
Macrolid	No	22(4.8)	438(95.2)	460(100)
	Yes	8(6.6)	113(93.4)	121(100)
Favipiravir	No	1(1.9)	53(98.1)	54(100)
	Yes	30(5.4)	530(94.6)	560(100)
Glucocorticoid	No	8(2.2)	361(97.8)	369(100)*
	Yes	24(11.0)	194(89.0)	218(100)*
Lopinavir/ritonavir	No	311(5.3)	551(94.7)	582(100)
	Yes	0(0.0)	1(100)	1(100)
Tocilizumab	No	28(4.9)	547(95.1)	575(100)*
	Yes	2(25.0)	6(75.0)	8(100)*
Anakinra	No	28(4.8)	553(95.2)	581(100)*
	Yes	3(60.0)	2(40.0)	5(100)*
Canvalescent Plasma	No	301(5.4)	529(94.6)	559(100)
	Yes	0(0.0)	25(100)	25(100)
Apheresis/immunoabsorption applications	No	29(5.0)	5541(95.0)	583(100)

	Yes	1(100)	0(0.0)	1(100)
Dialysis performed place during the active period of Covid-19	Another center or hospital	3(3.5)	82(96.5)	85(100)
	Attending center or hospital	29(5.4)	508(94.6)	537(100)
<b>ICU admission</b>				
Admission to ICU	No	17(4.3)	379(95.7)	396(100.0)*
	Yes	15(26.8)	41(73.2)	56(100.0)*
Mechanical ventilation	No	1(3.2)	30(96.8)	31(100)*
	Yes	16(59.3)	11(40.7)	27(100)*
ECMO application	No	141(29.2)	34(70.8)	48(100)
	Yes	0(0.0)	6(100)	6(100)
Slow continuous treatments (HF/HDF)	No	9(19.6)	37(80.4)	46(100)*
	Yes	6(66.7)	3(33.3)	9(100)*
Total length of hospital stay (including service + ICU), days		13(8-20)	12(9-17)	12(8-18)
Length of stay at ICU		10(4-17)	8(6-14)	9(6-15)
<b>28th day</b>				
Height (cm)		163(157-174)	165(160-172)	165(160-172)
Predialysis Weight (kg)		73(63-85)	70(60-80)	70(60-80)
Predialysis systolic blood pressure (mmHg)		137.5(120-150)	130(120-140)	130(120-140)
Predialysis diastolic blood pressure (mmHg)		80(70-80)	80(70-80)	80(70-80)
HD Time (min/session)		240(240-240)	240(240-240)	240(240-240)
UF volume (L/session)		3(2-3)	3(2-4)	3(2-4)
Ven Pump Pressure (mm/H2O)		125(100-165)	135(100-160)	134(100-160)
Pump speed (ml/min)		300(260-350)	300(300-350)	300(300-350)
Kt/V		1.6(1-2)	1.6(1-2)	1.6(1-2)
URR		71.5(65-78)	73(68-78)	73(68-78)
Residual urine volume (ml/day)		0(0-0)	0(0-0)	0(0-0)
Dialyzer surface area (m2)		1.7(2-2)	1.7(2-2)	1.7(2-2)
Weekly ESA dosage (IU/kg)		100(56-150)	83(0-150)	83.75(0-150)
Creatinine (mg/dl)		6.325(5-8)	7.62(6-9)	7.6(6-9)
K (mmol/L)		5.1(5-6)	5(5-6)	5(5-6)



Ca (mg/L)		8.55(8-9)	8.6(8-9)	8.6(8-9)
Phosphorus (mg/L)		5.3(4-6)	5(4-6)	5(4-6)
Parathormon (pg/mL)		350(280-674)	360.5(205-645)	358(206-646)
ALT (U/L)		11(8-19)	11(8-16)	11(8-16)
Albumin (g/dl)		3.7(3-4)	3.8(4-4)	3.8(4-4)*
Ferritin (ng/ml)		474(249-785)	514(290-813)	513(289-813)
CRP (mg/l)		7.4(2-31)	5.9(2-15)	5.9(2-15)*
Hemoglobin (g/dl)		10.8(10-11)	11(10-12)	11(10-12)
Leukocyte(/mm3)		7000(4395-8270)	6350(4930-7955)	6355(4910-7985)
Neutrophils (/mm3)		4150(2635-6315)	3885(2600-5230)	3885(2600-5240)
Lymphocytes (/mm3)		1265(860-1600)	1300(760-1757)	1290(770-1752)
<b>90th day</b>				
Height (cm)		165(157-175)	165(160-171)	165(160-172)
Predialysi Weight (kg)		69.5(58-85)	70(61-80)	70(61-80)
Predialysis systolic blood pressure (mmHg)		130(120-150)	130(120-144)	130(120-145)
Predialysis diastolic blood pressure (mmHg)		80(70-90)	80(70-80)	80(70-80)
HD Time (min/session)		240(240-240)	240(240-240)	240(240-240)
UF volume (L/session)		2.9(2-3)	3(2-4)	3(2-4)
Ven Pump Pressure (mm/H2O)		120(100-180)	132(110-162)	131.5(110-162)
Pump speed (ml/min)		300(250-350)	300(300-350)	300(300-350)
Kt/V		1.475(1-2)	1.6(1-2)	1.6(1-2)
URR		70.5(65-80)	73(68-78)	73(67-78)
Residual urine volume (ml/day)		0(0-0)	0(0-0)	0(0-0)
Dialyzer surface area (m2)		1.7(2-2)	1.7(2-2)	1.7(2-2)
Weekly ESA dosage (IU/kg)		120(75-150)	100(0-150)	100(0-150)
Creatinine (mg/dl)		6.54(4-8)	7.52(6-9)	7.5(6-9)
Potassium (mmol/L)		5.31(5-6)	5(5-6)	5(5-6)
Calcium (mg/dl)		8.47(8-9)	8.6(8-9)	8.6(8-9)
Phosphorus (mg/dl)		5.46(4-6)	4.8(4-6)	4.8(4-6)
Parathormon (pg/mL)		351(261-628)	352(200-613)	352(200-613)
ALT (U/L)		13(10-21)	11.25(8-17)	12(8-17)
Albumin (g/dl)		3.55(3-4)	3.76(3-4)	3.73(3-4)*

Ferritin (ng/ml)		782(465-1160)	563.4(326-872)	566(328-876)*
CRP (mg/l)		14(3-35)	6.6(2-17)	6.82(2-18)
Hemoglobin (g/dl)		9.76(9-11)	10.6(10-12)	10.6(9-12)*
Leukocyte(/mm <sup>3</sup> )		6720(4600-9280)	6250(4830-7810)	6300(4815-7850)
Neutrophils (/mm <sup>3</sup> )		3476.5(2630-6350)	3900(2700-5100)	3880(2700-5130)
Lymphocytes (/mm <sup>3</sup> )		1070(700-1600)	1220(730-1700)	1220(730-1700)

Abbreviations: COPD: Chronic obstructive pulmonary disease, A-V: Arteriovenous, ACE: Angiotensin-converting enzyme inhibitors, ARB: Angiotensin receptor blockers, ESA: Erythropoiesis stimulating agents, IV: Intravenous, ICU: Intensive care unit, ECMO: Extracorporeal Membrane Oxygenation, HF: Hemofiltration, HDF: Hemodiafiltration, UF: Ultrafiltration, HD: hemodialysis, URR: Urea reduction ratio, ALT: Alanine Aminotransferase, CRP: C reactive protein, ADPKD: Autosomal dominant polycystic kidney disease

\*p<0.05

**Supplementary Table 3:** The comparative presentation demographics, comorbidities, laboratory tests, and outcomes of the patients stratified according to hospitalization.

		Non-hospitalized COVID-19 Group N: 184	Hospitalized COVID-19 Group N: 452	Non-COVID group N: 587
<b><u>Demographics</u></b>				
Age (year), median (IQR)		55.5(43-66)	62(52-70) †	60(47-69)
Gender, n(%)	Women	86(46.7)	206(45.6)	239(40.7)
	Men	98(53.3)	246(54.4)	348(59.3)
Duration of dialysis (years), median (IQR)		48(24-96)	48(24-97)	53(24-96)
Body mass index (kg/m <sup>2</sup> )		25 (22-29)	25 (23-29)	25 (22-28)
Primary kidney disease, n(%)	Diabetic kidney disease	59(32.1)	171(37.8)*	160(27.3)*
	Primary Glomerulonephritis	10(5.4)	29(6.4)	43(7.3)
	Hypertensive nephrosclerosis	49(26.6)*	161(35.6)	216(36.8)*
	ADPKD	9(4.9)	19(4.2)	31(5.3)
	Other	57(31.0)	72† (15.9)	137(23.3)
<b>Comorbidities, n (%)</b>				
Diabetes mellitus		70(38.5)	206(46.0)*	196(33.6)*
Hypertension		133(73.1)	368(81.6)	443(75.7)
COPD		14(7.8)	64(14.4)	58(10.0)
Cardiac disease		58(32.2)	196(44.0)†	213(36.7)
Cerebrovascular disease		5(2.8)	25(5.8)	24(4.1)
Malignancy		6(3.4)	15(3.5)	18(3.1)
Chronic liver disease		6(3.4)	11(2.5)	21(3.6)
Autoimmune/autoinflammatory diseases		4(2.2)	12(2.8)	24(4.2)
History of fistula thrombosis		18(10.2)	58(13.7)	59(10.2)
History of non-fistula thromboembolic disease		2(1.1)	13(3.1)	13(2.2)
<b>Medications, n (%)</b>				
ACE inhibitor		22(12.4) *	89(20.9)*	118(20.4)
ARB		11(6.2)	49(11.4)	47(8.2)

Calcium channel blockers		69(38.5)	208(48.0)	236(41.2)
Beta-blocker		75(41.9)	204(47.6)	237(41.1)
Other antihypertensives		41(23.4)	81(19.0)	136(23.7)
Insulin		43(23.9)	155(35.6) <sup>†</sup>	139(24.0)
Oral antidiabetics		16(9.0)	30(6.9)	33(5.7)
Statin		30(16.9)	89(20.9)	99(17.1)
Antiaggregant		75(41.9) <sup>†</sup>	241(57.7)	310(53.6)
Anticoagulants		40(22.3)	103(24.5)	115(19.8)
ESA		134(74.4)	326(77.3)	428(73.5)
IV iron		110(61.1)	269(63.7)	374(64.5)
Vitamin D or analogs		88(48.9)	238(56.3)	338(57.9)
Phosphorus binders containing calcium		121(67.2)	309(73.0)	396(67.9)
Lanthanum		14(7.9)	19(4.7)	41(7.1)
Cinacalcet		16(9.0) *	68(16.9)*	77(13.3)
<b>Smoking, n(%)</b>	Never smoked	118(67.4) <sup>†</sup>	235(54.8)	314(56.3)
	Still smoking	25(14.3)	45(10.5)	80(14.3)
	Quited smoking	32(18.3) <sup>†</sup>	149(34.7)	164(29.4)
<b>Baseline (pre-COVID) lab data, median (IQR)</b>				
Potassium (mmol/L)		5(5-6)	5(5-6)	5(5-6)
Calcium (mg/dl)		8.6(8-9)	8.6(8-9)	8.6(8-9)
Phosphorus (mg/dl)		4.9(4-6)	5(4-6)	4.9(4-6)
Parathormone (pg/mL)		310(189-473) <sup>†</sup>	382.5(239-652)	352(193-687)
ALT (U/L)		11(8-16)	12(8-18)	11(7-16)
Albumin (g/dl)		3.9(4-4) <sup>†</sup>	3.8(4-4)	3.8(4-4)
Ferritin (ng/ml)		520(252-799)	533(310-908) <sup>†</sup>	492(278-764)
CRP (mg/l)		6.9(3-16)	8.7(3-23) <sup>†</sup>	4.0(2-11)
Hemoglobin (g/dl)		11(10-12)	10.9(10-12)	11(10-12)
Leukocyte(/mm <sup>3</sup> )		6500(5000-8400)	6400(5050-7900)*	6230(4800-7900)*
Number of neutrophils (/mm <sup>3</sup> )		3740(2380-5600)	3900(2700-5350)	3900(2670-5120)
<b>Symptoms</b>				

Fever		97(55.7)*	317(71.6)*	NA
Dyspnea		27(15.6)*	241(54.2)*	NA
Cough		80(46.0)*	311(70.0)*	NA
Diarrhea		13(7.6)*	75(17.3)*	NA
Loss of smell		34(20.1)*	62(14.4)*	NA
Loss of taste		35(20.7)*	76(17.7)*	NA
Presence of pneumonia at CT		66(48.2)*	365(85.5)*	NA
Clinical severity at the time of diagnosis	Asymptomatic disease	48(26.1)*	30(6.6)*	NA
	Mild disease	130(70.7)*	206(45.6)*	NA
	Moderate-to-severe disease	6(3.3)*	196(43.4)*	NA
	Serious-life threatening disease	0(0.0)	20(4.4)*	NA
<b>Treatments for COVID-19, n(%)</b>				
Hydroxychloroquine		27(16.6)*	107*(25.2)	NA
Oseltamivir		2(1.2)*	31*(7.4)	NA
Macrolides		16(9.7)*	105*(25.2)	NA
Favipiravir		152(89.4)	408(91.9)	NA
Glucocorticoids		10(6.1)*	208*(49.2)	NA
Tocilizumab		1(0.6)	7(1.7)	NA
Anakinra		01(0.0)	5(1.2)	NA
Convalescent Plasma		01(0.0)	25(6.0)	NA
<b>28th-day lab data, median (IQR)</b>				
Creatinine (mg/dl)		7.5(5.5-9.3)	7.0(5.6-8.5)*	7.9(6.3-9.6) *
Potassium (mmol/L)		4.8 (5-5)	5.0(4-5)*	5.1(5-6)*
Calcium (mg/dl)		8.5(8-9)	8.5(8-9)*	8.6(8-9)*
Phosphorus (mg/dl)		4.7(4-6)	4.9(4-6)	4.8(4-6)
Parathormone (pg/mL)		311(152-467) †	351(224-654)	365(207-659)
ALT (U/L)		11(8-16)	13(9-19)*	11(8-15)*
Albumin (g/dl)		3.82(3-4)	3.6(3-4) †	3.8(4-4)
Ferritin (ng/ml)		650(380-917)	653(350-1100)	505(307-750) †
CRP (mg/l)		7.9(3-20)	11(4-28)*	3.4(2-12)*

Hemoglobin (g/dl)		10.4(10-12)*	10.0(9-11)*	11.0(10-12) †
Leukocyte(/mm3)		6230(4830-8000)	6400(4970-7940)*	6200(4600-7800)*
Number of neutrophils (/mm3)		3605(2040-5530)	3970(2800-5300)	3910(2770-5040)
<b>28th-day Outcomes, n(%)</b>				
Non-survivor		0(0)	19(4.2) †	0(0)
Any respiratory symptom		14(7.6)*	138(30.5)*	11†(1.9)
Rehospitalization for any reason		7(3.8)	45(10.0) †	24(4.1)
Oxygen support at home		2(1.1)	24(5.3) †	2(0.3)
Lower respiratory infection		5(2.7)	60(13.3) †	8(1.4)
Urinary tract infection		1(0.5)	2(0.4)	6(1.0)
AV fistula thrombosis		3(1.6)	12(2.7) †	4(0.7)
Any other thromboembolic event		3(1.6)	10(2.2) †	2(0.3)
<b>90th-day lab data, median (IQR)</b>				
Creatinine (mg/dl)		7.3(5.9-9.2)*	7.1(5.7-8.7)	7.9(6.3-9.5)*
Potassium (mmol/L)		5(4.4-5.5)	5(4.6-5.5)	5(4.6-5.6)
Calcium (mg/dl)		8.7(8.2-9.2)	8.7(8.1-9.1)	8.6(8.1-9.1)
Phosphorus (mg/dl)		4.6(3.7-5.7)*	5.055(4.2-6.0)*	4.97(4.0-5.9)
Parathormone (pg/mL)		302(166-449)	350(177-590)	388(215-651)
ALT (U/L)		10(6.0-16.0)	12(8.0-17.0)	10(7.6-15.0)
Albumin (g/dl)		3.9(3.6-4.1)	3.8(3.5-4.0)	3.8(3.6-4.0)
Ferritin (ng/ml)		481(305-750)	551(279-931)*	476(292-762)*
CRP (mg/l)		5.7(3.0-11.9)	7.78(3.1-17.8)*	4.0(1.8-11.9)*
Hemoglobin (g/dl)		11.0(10.2-11.9)	11.0(10.0-11.9)	11.2(10.2-12.0)
Leukocyte(/mm3)		6400(5370-8000)	6430(5000-8030)*	6335(4840-7715)*
Number of neutrophils (/mm3)		3715(2507-5180)	3900(2800-5110)	3900(2790-4950)
<b>90th-day Outcomes, n(%)</b>				
Non-survivor		2(1.1)	32(7.1) †	4(0.7)
Any respiratory symptom		5(2.7)	44(9.7) †	10(1.7)
Rehospitalization for any reason		12(6.5)	35(7.7) *	18(3.1)*

Oxygen support at home		2(1.1)	11(2.4) *	2(0.3) *
Lower respiratory infection		1(0.5)	19(4.2) †	4(0.7)
Urinary tract infection		3(1.6)	4(0.9)	7(1.2)
AV fistula thrombosis		4(2.2)*	5(1.1)	2(0.3)*
Any other thromboembolic event		4(2.2)*	5(1.1)	1(0.2)*

**Abbreviations:** HD: hemodialysis, COPD: Chronic obstructive pulmonary disease, ADPKD: Autosomal dominant polycystic kidney disease, ESA: Erythropoietin-Stimulating Agents, IV: intravenous, ALT: Alanine Aminotransferase, CRP: C reactive protein, NA: Not applicable

\* the difference between these groups is statistically significant ( $p < 0.05$ ) in this row

† this group is statistically significantly different from the other groups ( $p < 0.05$ ) in this row

**Supplementary Table 4:** Binary logistic regression analysis of the baseline parameters related to the 90th-day mortality. COVID-19 group was divided into two groups according to hospitalization.

	OR	95% CI for OR		P
		Lower	Upper	
<b>Age (years)</b>	1.022	0.988	1.056	0.205
<b>Gender (male/female)</b>	0.880	0.385	2.012	0.762
<b>Diabetes mellitus</b>	1.089	0.460	2.578	0.846
<b>Cardiac disease</b>	1.022	0.430	2.426	0.961
<b>Group (Non-COVID group: reference)</b>				0.001
<b>Outpatient COVID-19 group</b>	0.969	0.099	9.487	0.979
<b>Hospitalized COVID-19 group</b>	7.854	1.032	59.757	0.047
<b>Vascular access (Tunneled catheter/AV fistula)</b>	3.522	1.496	8.292	0.004
<b>Albumin (g/dl)</b>	0.772	0.396	1.504	0.446
<b>CRP (mg/l)</b>	1.002	0.993	1.012	0.601
<b>Constant</b>	0.013			0.020

**Abbreviations:** OR: Odds ratio, CI: Confidence interval, AV: arteriovenous

The model included the parameters that were found different between groups in supplementary Table 3. We also added gender and diabetes mellitus, which might be effective in survival based on the literature.



STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
<b>Title and abstract</b>	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract <b>YES</b> (b) Provide in the abstract an informative and balanced summary of what was done and what was found <b>YES</b>
<b>Introduction</b>		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported <b>YES</b>
Objectives	3	State specific objectives, including any prespecified hypotheses <b>YES</b>
<b>Methods</b>		
Study design	4	Present key elements of study design early in the paper <b>YES</b>
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection <b>YES</b>
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <b>YES</b> <i>Case-control study</i> —Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants (b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed <b>YES</b> <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable <b>YES</b>
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group <b>YES</b>
Bias	9	Describe any efforts to address potential sources of bias <b>YES</b>
Study size	10	Explain how the study size was arrived at <b>YES</b>
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why <b>YES</b>
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding <b>YES</b> (b) Describe any methods used to examine subgroups and interactions <b>YES</b> (c) Explain how missing data were addressed <b>YES</b> (d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed

*Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy

(e) Describe any sensitivity analyses

## Results

Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed <b>YES</b> (b) Give reasons for non-participation at each stage <b>YES</b> (c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders <b>YES</b> (b) Indicate number of participants with missing data for each variable of interest <b>YES</b> (c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount) <b>YES</b>
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time <b>YES</b> <i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure <i>Cross-sectional study</i> —Report numbers of outcome events or summary measures
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included <b>YES</b> (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses <b>YES</b>

## Discussion

Key results	18	Summarise key results with reference to study objectives <b>YES</b>
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias <b>YES</b>
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence <b>YES</b>
Generalisability	21	Discuss the generalisability (external validity) of the study results <b>YES</b>

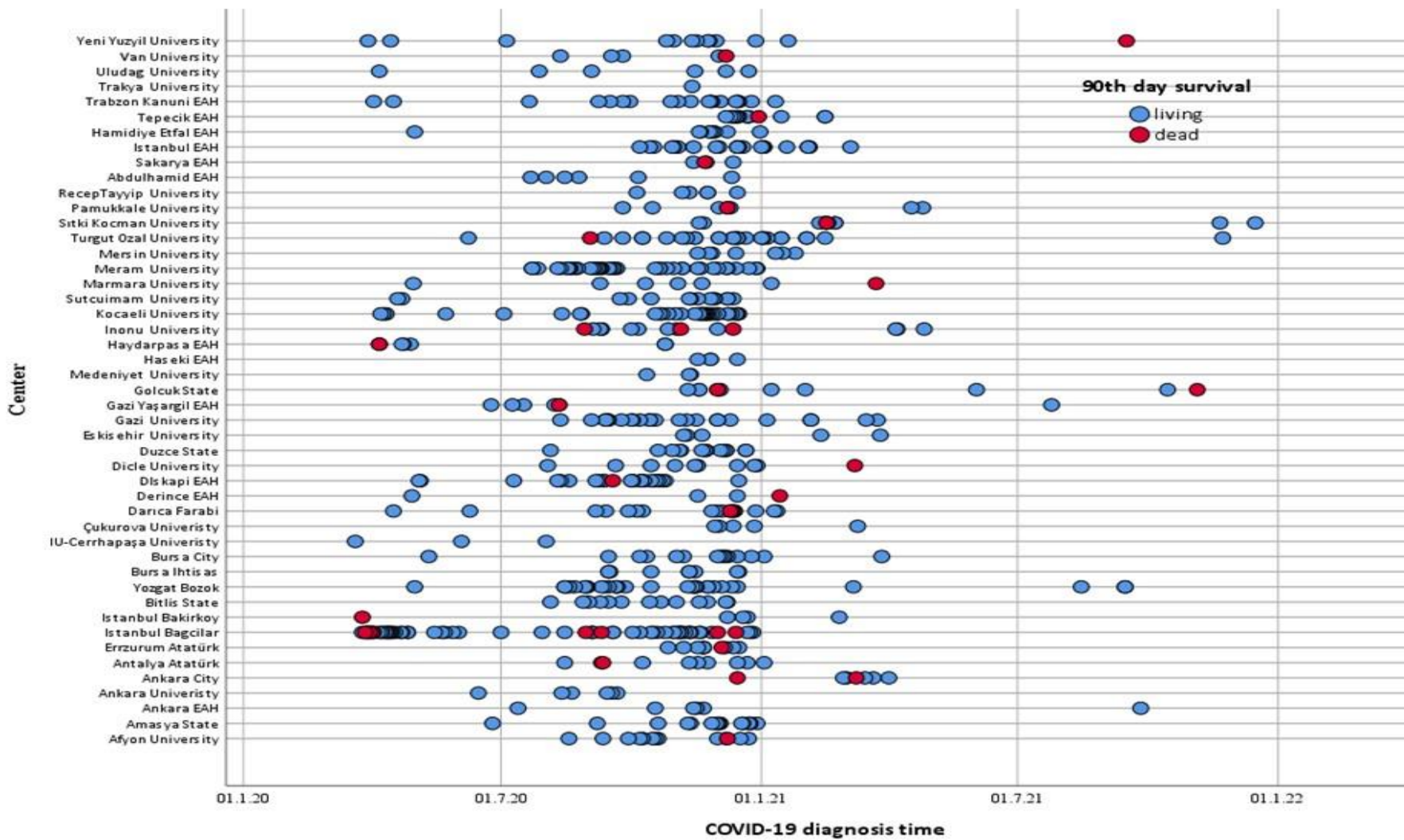
## Other information

Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based <b>YES</b>
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\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction

with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).



Supplementary Figure 1