



Supplementary Table S4. Extended laboratory characteristics of studied groups and outcomes, presented as median (Q1-Q3). *P* values were derived with Mann-Whitney U test.

Parameter /time	Group	PaO ₂ (mmHg)	<i>P</i> value	PaO ₂ /FiO ₂	<i>P</i> value	Hgb (mmol/L)	<i>P</i> value
Baseline	CR	87 (73-1310)	<0.001	203 (126-277)	<0.001	8.5 (7.8-9.0)	0.213
	NR	64 (61-78)		106 (78-177)		8.0 (7.6-9.0)	
On TCZ administration	CR	-	-	-	-	8.3 (7.8-8.9)	0.546
	NR	-		-		8.2 (7.6-8.8)	
On 2 nd day after TCZ	CR	-	-	-	-	8.3 (7.6-8.9)	0.813
	NR	-		-		8.4 (7.6-9.1)	
On 5 th day after TCZ	CR	-	-	-	-	8.8 (7.9-9.4)	0.610
	NR	-		-		8.8 (7.9-9.6)	
Last recorded	CR	-	-	-	-	8.8 (8.1-9.5)	0.098
	NR	-		-		8.5 (7.4-9.2)	

Parameter /time	Group	RBC (G/L)	<i>P</i> value	Hct (%)	<i>P</i> value	WBC (G/L)	<i>P</i> value
Baseline	CR	4.7 (4.3-5.1)	0.347	39.9 (36.7-42.4)	0.142	6.6 (5.2-8.3)	0.720
	NR	4.5 (4.1-4.9)		37.8 (36.1-41.5)		6.3 (4.7-9.5)	
On TCZ administration	CR	4.5 (4.2-5.0)	0.720	39.3 (36.8-42.6)	0.566	5.5 (5.0-7.6)	0.006
	NR	4.4 (4.1-4.9)		38.7 (35.5-42.0)		7.4 (5.5-9.8)	
On 2 nd day after TCZ	CR	4.5 (4.2-4.9)	0.416	39.2 (36.0-42.4)	0.495	6.0 (4.2-7.9)	<0.001
	NR	4.6 (4.1-5.0)		40.1 (36.0-42.9)		7.8 (7.0-11.2)	
On 5 th day after TCZ	CR	4.8 (4.3-5.1)	0.275	41.3 (37.0-44.0)	0.643	7.1 (5.4-8.4)	<0.001
	NR	4.9 (4.4-5.3)		41.3 (37.4-45.1)		12.2 (9.4-15.8)	
Last recorded	CR	4.8 (4.3-5.3)	0.322	41.7 (37.8-45.7)	0.322	6.6 (4.9-9.7)	<0.001
	NR	4.7 (4.1-5.2)		40.2 (36.7-44.3)		11.8 (6.5-30.9)	

Parameter /time	Group	Neutrocytes (G/L)	P value	Monocytes (G/L)	P value	Lymphocytes (G/L)	P value
Baseline	CR	5.1 (3.8-6.3)	0.426	0.4 (0.2-0.5)	0.350	0.7 (0.5-0.9)	0.517
	NR	5.3 (3.4-8.7)		0.3 (0.2-0.5)		0.8 (0.5-0.9)	
On TCZ administration	CR	4.2 (3.0-5.8)	0.003	0.3 (0.2-0.4)	0.388	0.8 (0.6-1.1)	0.951
	NR	5.9 (4.4-8.0)		0.4 (0.2-0.6)		0.8 (0.6-1.0)	
On 2 nd day after TCZ	CR	4.2 (2.8-5.7)	<0.001	0.4 (0.3-0.7)	0.286	1.1 (0.8-1.4)	0.023
	NR	6.3 (5.4-8.8)		0.4 (0.2-0.6)		0.9 (0.6-1.1)	
On 5 th day after TCZ	CR	4.6 (3.4-6.5)	<0.001	0.6 (0.5-0.8)	0.053	1.5 (1.1-2.2)	<0.001
	NR	9.5 (6.4-13.0)		0.5 (0.4-0.7)		0.9 (0/6-1.3)	
Last recorded	CR	4.1 (2.6-6.5)	<0.001	0.7 (0.5-0.9)	0.018	1.7 (1.2-2.5)	<0.001
	NR	9.3 (4.6-17.3)		0.6 (0.4-0.8)		1.2 (0.6-1.7)	

Parameter /time	Group	NLR	P value	NMR	P value	PLT (G/L)	P value
Baseline	CR	6.0 (5.0-10.3)	0.764	14.2 (9.5-21.2)	0.235	204 (150-274)	0.939
	NR	7.4 (4.7-10.8)		16.9 (10.9-31.2)		201 (166-254)	
On TCZ administration	CR	5.0 (3.2-9.4)	0.069	14.0 (7.9-21.9)	0.287	237 (177-300)	0.791
	NR	7.0 93.8-11.9)		15.0 (11.1-20.4)		224 (198-293)	
On 2 nd day after TCZ	CR	3.7 (2.3-5.5)	<0.001	8.9 (6.3-12.9)	<0.001	305 (221-368)	0.278
	NR	7.6 (4.2-13.5)		16.3 (10.6-24.2)		275 (211-317)	
On 5 th day after TCZ	CR	3.1 (1.9-5.4)	<0.001	7.3 (5.4-10.3)	<0.001	343 (256-394)	0.007
	NR	9.8 (6.2-19.7)		17.6 (11.5-32.1)		269 (184-350)	
Last recorded	CR	2.3 (1.3-3.9)	<0.001	5.5 (3.2-8.0)	<0.001	312 (252-381)	<0.001
	NR	9.9 (3-24.1)		14.9 (6.9-32.0)		209 (151-297)	

Parameter /time	Group	INC (G/L)	P value	CRP (mg/L)	P value	Natremia (mmol/L)	P value
Baseline	CR	0.04 (0.02-0.06)	0.426	118.5 (66.7-165.7)	0.809	138 (135-139)	0.107
	NR	0.04 (0.02-0.06)		129.8 (62.4-189.5)		136 (132-139)	
On TCZ administration	CR	0.04 (0.02-0.07)	0.051	111.9 (66.1-185.6)	0.643	139 (137-141)	0.465
	NR	0.06 (0.04-0.10)		101.2 (64.3-166)		139 (137-141)	
On 2 nd day after TCZ	CR	0.05 (0.03-0.12)	0.002	46.0 (21.7-83.9)	0.428	140 (139-142)	0.771
	NR	0.12 (0.05-0.33)		41.7 (20.0-59.6)		141 (138-143)	
On 5 th day after TCZ	CR	0.06 (0.03-0.14)	0.007	9.6 (4.6-19.8)	0.775	139 (137-142)	0.853
	NR	0.14 (0.05-0.29)		8.7 (4.5-23.7)		139 (139-141)	
Last recorded	CR	0.07 (0.02-0.17)	<0.001	2.9 (1.1-5.5)	0.004	139 (137-141)	<0.001
	NR	0.28 (0.06-0.86)		8.1 (1.0-71.9)		142 (139-146)	

Parameter /time	Group	Kaliemia (mmol/L)	P value	SCr (µmol/L)	P value	BUN (mg/dL)	P value
Baseline	CR	4.1 (3.8-4.4)	0.308	74 (65-89)	0.030	15.4 (12.3-21.5)	0.018
	NR	4.2 (3.9-4.5)		85 (73-109)		20.5 (15.7-22.9)	
On TCZ administration	CR	4.3 (4.0-4.7)	0.757	69 (61-81)	0.068	16.3 (13.2-21.8)	0.003
	NR	4.4 (4.0-4.7)		76 (68-91)		22.7 (15.3-25.2)	
On 2 nd day after TCZ	CR	4.5 (4.2-4.8)	0.508	67 (61-76)	0.056	17.0 (13.8-21.8)	0.005
	NR	4.4 (4.2-4.7)		72 (64-85)		23.8 (15.1-31.8)	
On 5 th day after TCZ	CR	4.6 (4.2-4.8)	0.443	68 (62-79)	0.005	16.0 (13.7-20.8)	<0.001
	NR	4.5 (4.0-4.9)		80 (64-108)		25.5 (18.7-34.6)	
Last recorded	CR	4.5 (4.2-4.8)	0.267	70 (62-83)	<0.001	15.7 (12.3-19.5)	<0.001
	NR	4.6 (4.2-5.1)		99 (72-160)		35.1 (18-61.3)	

Parameter /time	Group	Glucose (mmol/L)	P value	hs-TnI (ng/L)	P value	Total bilirubin (μmol/L)	P value
Baseline	CR	5.9 (5.2-7.3)	0.052	4 (4-8)	<0.001	8.4 (6.7-11.4)	0.641
	NR	6.7 (5.9-8.1)		11 (5-24)		7.8 (6.5-11.2)	
On TCZ administration	CR	-	-	3 (3-6)	<0.001	8.9 (6.0-11.0)	0.433
	NR	-		11 (4-31)		8.0 (6.4-9.6)	
On 2 nd day after TCZ	CR	-	-	-	-	8.9 (6.1-11.5)	0.435
	NR	-		-		8.3 (7.1-9.3)	
On 5 th day after TCZ	CR	-	-	3 (3-4)	<0.001	10.9 (8.3-13.0)	0.789
	NR	-		18 (4-101)		11.2 (8.0-13.1)	
Last recorded	CR	-	-	3 (3-4)	<0.001	10.4 (8.8-13.7)	0.508
	NR	-		15 (4-201)		11.6 (9.3-14.5)	

Parameter /time	Group	AST (IU/L)	P value	ALT (IU/L)	P value	ALP (IU/L)	P value
Baseline	CR	42 (31-59)	0.038	38 (27-54)	0.171	-	-
	NR	52 (35-76)		32 (19-50)		-	
On TCZ administration	CR	42 (32-59)	0.085	43 (29-67)	0.243	61 (48-72)	0.071
	NR	47 (38-78)		35 (24-62)		71 (50-81)	
On 2 nd day after TCZ	CR	41 (31-57)	0.166	58 (37-85)	0.039	-	-
	NR	46 (36-70)		44 (26-65)		-	
On 5 th day after TCZ	CR	41 (27-66)	0.359	73 (50-125)	0.039	61 (47-68)	<0.001
	NR	47 (28-100)		52 (35-98)		86 (64-93)	
Last recorded	CR	35 (26-52)	0.051	89 (48-128)	0.139	60 (54-65)	<0.001
	NR	44 (27-126)		63 (38-106)		88 (59-108)	

Parameter /time	Group	GGT (IU/L)	P value	INR	P value	aPTT (s)	P value
Baseline	CR	-	-	1.16 (1.09-1.24)	0.981	32.8 (29.3-37.1)	0.525
	NR	-		1.16 (1.10-1.22)		33.4 (30.3-36.4)	
On TCZ administration	CR	76 (36-138)	0.596	1.15 (1.08-1.30)	0.519	32.6 (28.8-36.2)	0.017
	NR	58 (36-113)		1.15 (1.08-1.25)		28.1 (25.5-30.8)	
On 2 nd day after TCZ	CR	-	-	-	-	-	-
	NR	-		-		-	
On 5 th day after TCZ	CR	81 (38-162)	0.999	1.10 (1.04-1.19)	0.058	28.1 (25.5-30.8)	0.921
	NR	90 (40-148)		1.13 (1.09-1.24)		28.4 (24.7-31.1)	
Last recorded	CR	90 (53-131)	0.896	1.11 (1.04-1.48)	0.672	27.5 (24.8-30.5)	0.208
	NR	85 (44-137)		1.17 (1.08-1.31)		28.6 (24.8-33.7)	

Parameter /time	Group	D-Dimer (µg/mL)	P value	TSH (µIU/L)	P value	25(OH)D ₃ (ng/mL)	P value
Baseline	CR	0.8 (0.6-1.4)	0.552	0.91 (0.60-1.20)	0.104	27 (17-34)	0.013
	NR	0.9 (0.6-1.3)		0.62 (0.32-1.11)		24 (13-28)	
On TCZ administration	CR	0.9 (0.6-1.5)	0.005	-	-	-	-
	NR	1.7 (0.7-3.7)		-		-	
On 2 nd day after TCZ	CR	1.1 (0.7-1.8)	<0.001	-	-	-	-
	NR	6.1 (1.4-27.4)		-		-	
On 5 th day after TCZ	CR	1.2 (0.6-1.7)	<0.001	-	-	-	-
	NR	6.5 (1.7-20.1)		-		-	
Last recorded	CR	0.7 (0.4-1.4)	<0.001	-	-	-	-
	NR	2.2 (1.5-4.8)		-		8-	

Parameter /time	Group	TP (g/L)	P value	albumin (g/L)	P value	ferritin (ng/mL)	P value
Baseline	CR	-	-	-	-	-	-
	NR	-	-	-	-	-	-
On TCZ administration	CR	63 (60-66)	0.518	36 (34-38)	0.335	1144 (697-1527)	0.849
	NR	62 (59-66)		36 (33-37)		1075(646-1737)	
On 2 nd day after TCZ	CR	-	-	-	-	-	-
	NR	-	-	-	-	-	-
On 5 th day after TCZ	CR	63 (59-66)	0.029	37 (34-40)	<0.001	1156 (633-1789)	0.012
	NR	59 (56-63)		33 (30-37)		800 (508-1106)	
Last recorded	CR	-	-	-	-	590 (439-706)	<0.001
	NR	-	-	-	-	1291 (784-1719)	<0.001

Parameter /time	Group	LDH (IU/L)	P value	Chloride (mmol/L)	P value	CK (IU/L)	P value
Baseline	CR	405 (326-485)	<0.001	-	-	-	-
	NR	510 (417-695)		-	-	-	-
On TCZ administration	CR	408 (355-478)	<0.001	102 (100-104)	0.175	104 (56-188)	0.031
	NR	646 (463-802)		104 (100-105)		167 (79-371)	
On 2 nd day after TCZ	CR	374 (312-444)	<0.001	-	-	-	-
	NR	610 (486-871)		-	-	-	-
On 5 th day after TCZ	CR	332 (272-408)	<0.001	103 (102-106)	0.858	41.5 (27-61)	<0.001
	NR	743 (477-961)		104 (102-105)		100 (47-194)	
Last recorded	CR	258 (229-333)	<0.001	-	-	-	-
	NR	715 (323-977)		-	-	8-	-

Parameter /time	Group	BNP (ng/L)	P value	PCT (ng/mL)	P value
Baseline	CR	-	-	0.08 (0.05-0.15)	0.645
	NR	-	-	0.08 (0.05-0.18)	
On TCZ administration	CR	32 (16-55)	0.003	0.07 (0.05-0.14)	0.464
	NR	61 (38-103)		0.09 (0.04-0.24)	
On 2 nd day after TCZ	CR	-	-	0.04 (0.03-0.08)	0.418
	NR	-	-	0.05 (0.03-0.10)	
On 5 th day after TCZ	CR	19 (8-40)	0<0.001	0.03 (0.02-0.04)	,0.015
	NR	86 (36-134)		0.04 (0.02-0.14)	
Last recorded	CR	-	-	0.02 (0.02-0.02)	<0.001,-
	NR	-	-	0.30 (0.02-1.38)	

PaO₂ – partial pressure of arterial oxygen, FiO₂ – fraction of inspired oxygen, Hgb – hemoglobin, RBC – red blood cell count, Hct – hematocrit, WBC – white blood cell count, NLR – neutrocyte-to-lymphocyte ratio, NMR – neutrocyte-to-monocyte ratio, PLT – platelet count, INC – immature neutrocyte count, CRP – C-reactive protein concentration, SCr – serum creatinine concentration, BUN – blood urea nitrogen, hs-TnI – high sensitive troponin I, AST – aspartate aminotransferase, ALT – alanine aminotransferase, ALP – alkaline phosphatase, GGT – gamma-glutamyl transferase, INR – international normalized ratio, aPTT – activated partial thromboplastin time, TSH – thyrotropin, 25(OH)D₃ – calcifediol, TP – total protein, LDH – lactate dehydrogenase, CK – creatine kinase, BNP – B-type natriuretic peptide, PCT – procalcitonin