

Supplementary Table 1: Numbers of patients with glomerular diseases followed at each center*.

Centers	Number of followed-up GN Patients (n)	COVID-19 Cases (n)
Vall d'Hebron, Barcelona, SP	1,000-1,500	16
London, UK	2,040	5
Bellvitge, Barcelona, SP	679	4
Glasgow, UK	600	4
Reading, UK	290	3
Mexico City, MX	300	2
New York, US	300	2
Parma, IT	200	2
Madrid, SP	370	1
Bologna, IT	300	1

*The number is an approximate provided by each center.

Supplementary Table 2: Density of immunosuppression based on glomerular disease diagnosis and duration of disease.

Glomerular disease	Duration of disease				
	< 6 months	6-12 months	12-24 months	2-5 years	>5years
Lupus nephritis	<ul style="list-style-type: none"> • RTX, (5 mos) • MP: 250 mg (41 d); Pred: 16 mg/d 	<ul style="list-style-type: none"> • MMF + Pred 10 mg/d 	<ul style="list-style-type: none"> •MMF + Pred 5 mg/d •Methotrexate 	<ul style="list-style-type: none"> • Tacrolimus 	<ul style="list-style-type: none"> •Pred: 5 mg/d •MMF + Pred: 10 mg/d •MMF + Pred: 5 mg/d
Vasculitis	<ul style="list-style-type: none"> • RTX (1 mos) + Pred: 5 mg /d 		<ul style="list-style-type: none"> •Azathioprine + Pred: 7.5 mg/d • MMF + Pred: 5mg/d 		<ul style="list-style-type: none"> • RTX (1 mos) + MMF + Pred: 5 mg/d
Minimal Change disease				<ul style="list-style-type: none"> •Cyclosporine 	
Focal Segmental glomerulosclerosis		<ul style="list-style-type: none"> • MMF + Pred: 10 mg/d 			
Membranous nephropathy			<ul style="list-style-type: none"> RTX (1 mos) 		
IgA Nephropathy					<ul style="list-style-type: none"> Pred: 25 mg/d
Post infectious GN	<ul style="list-style-type: none"> • Pred: 7.5 mg/d 				
AA amyloid			<ul style="list-style-type: none"> Azathioprine 		
Membranoproliferative GN					<ul style="list-style-type: none"> •Sulfasalazine, Methotrexate

In parenthesis are days or months administered prior to COVID-19. Each dot represents a different patient. RTX: rituximab; Pred: prednisone; MP: methylprednisolone; MMF: mycophenolate mofetil.

Supplementary Table 3: Complications in “kidney limited” (local) versus systemic GN patients with COVID-19.

Complication	GN total (n=40)	Local GN (n=24)	Systemic GN (n=16)	P Value
Hospitalized	28 (70.0)	15 (62.5)	13 (81.3)	0.30
Mechanical ventilation	3 (11.1) (n=27)	0 (n=14)	3 (23.1) (n=13)	0.10
Inotropes or other vasopressors	2 (7.4) (n=28)	0 (n=15)	2 (15.4) (n=13)	0.21
Description of illness				
Pneumonia	21 (52.5)	12 (50)	9 (56.3)	0.30
ARDS, non-invasive ventilation	3 (7.5)	1 (4.2)	2 (12.5)	0.55
ARDS, intubated	3 (7.5)	0	3 (18.8)	0.057
Septic shock	2 (5.0)	0	2 (12.5)	0.15
Developed AKI	15 (38.5) (n=39)	9 (37.5)	6 (40.0) (n=15)	1.0
Stage 1	3 (25.0)	2 (25.0)	1 (25.0)	0.72
Stage 2	3 (25.0)	3 (37.5)	0	
Stage 3	6 (50.0) (n=12)	3 (37.5) (n=8)	3 (75.0) (n=4)	
RRT new onset	7 (17.5)	3 (12.5)	4 (25.0)	0.41
Days of RRT	23.3 ±11.6 (n=6)	25.0 ±15.6 (n=3)	21.7 ±9.1 (n=3)	0.77
Need for RRT at discharge	4 (80.0) (n=5)	2 (66.7) (n=3)	2 (100.0) (n=2)	1.0
Other non-renal complications				
Cardiac				
MI	2 (5.6) (n=36)	1 (4.8) (n=21)	1 (6.7) (n=15)	1.0
Arrhythmia	1 (2.8) (n=36)	1 (4.8) (n=21)	0 (n=15)	1.0
GI	3 (8.1) (n=37)	2 (9.1) (n=22)	1 (6.7) (n=15)	1.0
CNS	1 (2.7) (n=37)	1 (4.6) (n=22)	0 (n=15)	1.0
Hematologic				
PE	2 (5.0)	1 (4.2)	1 (6.3)	1.0
DVT	2 (5.0)	0	2 (12.5)	0.16
Superimposed bacterial infection	6 (15.8) (n=38)	3 (13.6) (n=22)	3 (18.8)	0.68
Length of hospital stay days	15.0 (8.0-21.0) (n=27)	14.0 (9.0-17.0) (n=15)	16.5 (7.0-21.0) (n=12)	0.87
Death	6 (15.0)	2 (8.3)	4 (25.0)	0.20

Data are n (%), or mean ± SD or median (IQR). Sample sizes are listed if they are fewer than the respective denominators shown in the header row. Percentages may not add to 100 due to rounding or missing/N/A responses. AKI: Acute kidney injury; ARDS: Acute respiratory distress syndrome; CNS: Central nervous system; DVT: Deep vein thrombosis; GI: Gastrointestinal; MI: Myocardial infarction; PE: Pulmonary embolism; RRT: Renal replacement therapy.

Supplementary Table 4: Changes in kidney parameters in GN patients and controls stratified according to main outcomes.

	GN Patients						Controls							
	Total (n=40)	Died yes (n=6)	Died No (n=34)	P Value	AKI (n=15)	AKI No (n=24)	P Value	Total (n=80)	Died yes (n=4)	Died no (n=76)	P Value	AKI yes (n=11)	AKI No (n=68)	P Value
Serum creatinine (mg/dl)														
Pre COVID	1.41 (0.89-1.91)	1.72 (1.40-1.87)	1.29 (0.87-1.93)	0.37	1.80 (1.13-2.12)	1.15 (0.85-1.75)	0.09	0.90 (0.79-1.01) (n=70)	0.90 (0.76-1.14)	0.90 (0.79-1.01) (n=66)	0.96	1.20 (0.80-1.30) (n=10)	0.89 (0.79-1.00) (n=60)	0.024
At presentation	1.93 (1.09-4.36) (n=27)	3.67 (2.30-5.04) (n=2)	1.93 (1.09-3.81) (n=25)	0.33	2.57 (1.93-5.04) (n=14)	1.23 (0.76-1.81) (n=12)	0.003	0.83 (0.75-1.06) (n=77)	1.03 (0.89-1.73)	0.83 (0.75-1.05) (n=73)	0.19	2.00 (0.94-6.20)	0.83 (0.74-0.98) (n=66)	<0.001
At peak	2.58 (1.23-7.03) (n=24)	5.19 (2.79-7.59) (n=2)	2.20 (1.09-6.48) (n=22)	0.43	4.89 (2.79-7.59) (n=14)	1.09 (0.77-1.47) (n=9)	<0.001	1.02 (0.77-3.00) (n=39)	3.71 (2.39-5.02) (n=2)	0.96 (0.77-2.21) (n=37)	0.15	5.02 (3.00-7.00)	0.84 (0.72-1.26) (n=28)	<0.001
Post COVID	1.50 (0.94-3.51) (n=20)	N/A	1.50 (0.94-3.51) (n=20)	N/A	2.85 (1.36-4.51) (n=11)	0.89 (0.72-1.19) (n=9)	0.015	0.81 (0.71-0.96) (n=72)	5.02 (n=1)	0.80 (0.71-0.94) (n=71)	0.11	2.01 (1.70-5.02) (n=10)	0.78 (0.69-0.86) (n=62)	<0.001
Serum albumin (g/dl)														
Pre-COVID	3.54 ±0.62 (n=38)	3.47 ±0.43	3.56 ±0.66 (n=32)	0.75	3.39 ±0.69 (n=13)	3.67 ±0.55	0.32	3.92 ±0.55 (n=35)	3.23 (n=1)	3.94 ±0.54 (n=34)	0.21	3.83 ±0.30 (n=7)	3.94 ±0.60 (n=28)	0.65
At presentation	2.83 ±0.88 (n=22)	2.75 ±0.78 (n=2)	2.83 ±0.90 (n=20)	0.90	2.29 ±0.86 (n=11)	3.44 ±0.44 (n=10)	0.001	3.60 ±0.86 (n=62)	2.67 (n=1)	3.61 ±0.86 (n=61)	0.28	2.95 ±1.27 (n=9)	3.71 ±0.73 (n=53)	0.12
Post-COVID	2.51 ±0.86 (n=15)	N/A	2.51 ±0.86 (n=15)	N/A	1.96 ±0.40 (n=8)	3.37 ±0.57 (n=6)	<0.001	3.61 ±0.51 (n=61)	2.48 (n=1)	3.63 ±0.50 (n=60)	0.026	3.23 ±0.76 (n=9)	3.68 ±0.44 (n=52)	0.12
Proteinuria (g/day)														
Pre- COVID	1.00 (0.33-3.20) (n=35)	0.87 (0.70-3.24) (n=5)	1.10 (0.25-2.69) (n=30)	0.65	2.96 (0.44-4.06) (n=12)	0.84 (0.33-1.83) (n=22)	0.17	N/A	N/A	N/A	N/A	N/A	N/A	
Post-COVID	3.82 (1.48-9.91) (n=6)	3.65 (n=1)	3.98 (1.48-9.91) (n=5)	0.86	3.98 (3.65-9.91) (n=5)	0.30 (n=1)	0.29	N/A						

Data are mean ± SD or median (IQR). Sample sizes are listed if they are fewer than the respective denominators shown in the header row. "Post-COVID" is defined by absence of, or marked improvement in original COVID-19-related symptoms or signs. N/A not available.