

EFFECTS OF DIFFERENT DIALYSIS STRATEGIES ON INFLAMMATORY CYTOKINE PROFILE IN MAINTENANCE HEMODIALYSIS PATIENTS WITH COVID-19: A RANDOMIZED TRIAL.

Supplementary table 1.

Basal characteristics of study cohort at the beginning of treatment with two different dialysis membranes

	HDx	PLD	p
N	15	14	
Age, years	71.2±15.4	64.2±15.4	0.54
Sex, M/F	8/7	7/7	0.9
Dialysis vintage, months	38 (73)	54 (51)	0.7
Qb, mL/min	290±20	293±18	0.7
WBC, x10 ⁹ /L	5.9±3.3	6±4.3	0.88
Neutrophils, x10 ⁹ /L	4.7±3.2	4.4±4.3	0.85
Lymphocytes, x10 ⁹ /L	0.6±0.24	0.86±0.4	0.18
N/L ratio	7.1 (7.8)	4.6 (4.5)	0.14
CRP, mg/L	15.3 (41.7)	24 (64)	0.4
Ferritin, µg/L	638 (903)	308 (1008)	0.24
LDH, U/L	230±75	253±65	0.19
PCT, µg/L	1.8 (8.3)	2 (3.7)	0.85
CD3+CD4+, cells/µL	284±173	283±147	0.99
CD3+CD8+, cells/µL	162±128	227±113	0.17
CD19+, cells/µL	60.6±37	51.4±40	0.54
NK, cells/µL	87.5 (103.5)	82 (645)	0.88
IL-6, pg/ml	34 (67)	24 (51.5)	0.4
IL-8, pg/ml	62.8 (59.5)	26 (20)	0.22
IL-10, pg/ml	14.9 (12)	20 (24)	0.35
sTLR4, ng/ml	0.9 (0.7)	1.3 (1.1)	0.16
IFN-γ, pg/ml	0.1 (0.1)	0.1 (0.05)	0.5

Data are expressed as mean ± SD or median (IQR). All values were determined in predialysis.

Abbreviations: Expanded hemodialysis (HDx), protein-leaking dialysis (PLD), white blood cells (WBC), neutrophil/lymphocyte (N/L), C-reactive protein (CRP), lactate dehydrogenase (LDH), procalcitonin (PCT), neutrophil/lymphocyte ratio (N/L), interleukin-6 (IL-6), interleukin-8 (IL-8), interleukin-10 (IL-10), soluble TLR4 (sTLR4), and interferon-gamma (IFN-γ)

Supplementary table 2.

Basal cytokine levels and clinical outcomes in HD patients with COVID-19

	Hospitalized patients		p	Survival status		p
	Yes (13)	No (18)		Died (7)	Alive(24)	
IL-6, pg/ml	48 (74)	23.1(31)	0.2	45 (45.7)	20.7 (48.5)	0.1
IL-8, pg/ml	26 (43.8)	40 (210)	0.3	33 (43)	26 (100)	0.91
IL-10, pg/ml	14.9 (21)	6.1 (18)	0.08	9 (29)	10 (19)	0.9
sTLR4, ng/ml	0.98 (0.9)	1.1 (1.2)	0.3	1(1)	1 (1.2)	0.9

Data are expressed as median (IQR). Abbreviations: interleukin-6 (IL-6), interleukin-8 (IL-8), interleukin-10 (IL-10), soluble TLR4 (sTLR4),

Supplementary table 3.

Clinical outcomes of HD patients with COVID-19 treated with two different dialysis membranes

	HDx	PLD	p
N	15	14	
Illness duration, days *	34±28	30±22	0.9
Hospitalized patients, n (%)	8 (53%)	5 (36%)	0.46
Deaths, n (%)	2 (13%)§	3 (21%)	0.65

Abbreviations: Expanded hemodialysis (HDx), protein-leaking dialysis (PLD)

* Illness duration was calculated from the date of the first positive RT-PCR assay for SARS-COV2 infection to the date of death or of the two consecutive negative RT-PCR assays.

§ In HDx group two additional deaths occurred after the completion of the study of cytokine profile, respectively at 28 and 38 days from COVID-19 diagnosis.