

Supplementary Data

Hematimetry

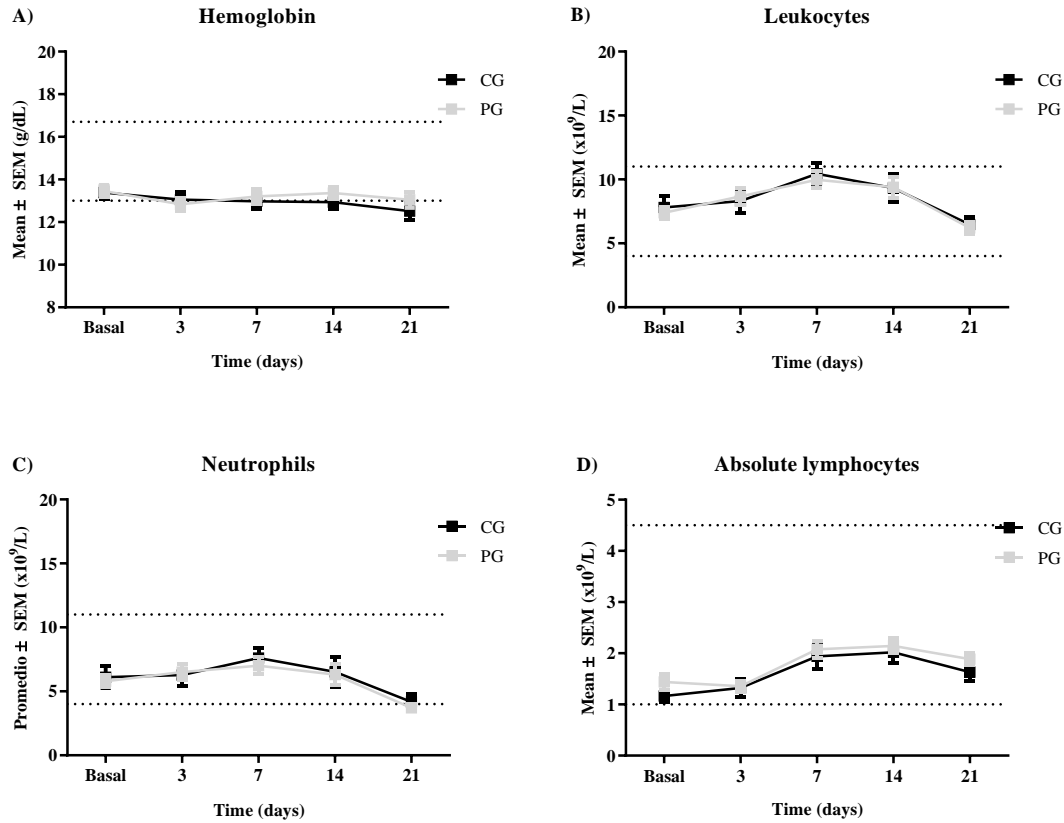


Figure S1. Changes in hematology parameters from baseline to the end of the follow-up period (baseline, 3, 7, 14, 21) in control group (CG) and plasma group (PG). Lines represent the mean \pm SEM of the following parameters in each previous mentioned time point: (A) haemoglobin (g/dL), (B) leukocytes ($\times 10^9/L$), (C) neutrophils ($\times 10^9/L$), and (D) absolute lymphocytes ($\times 10^9/L$).

Coagulation

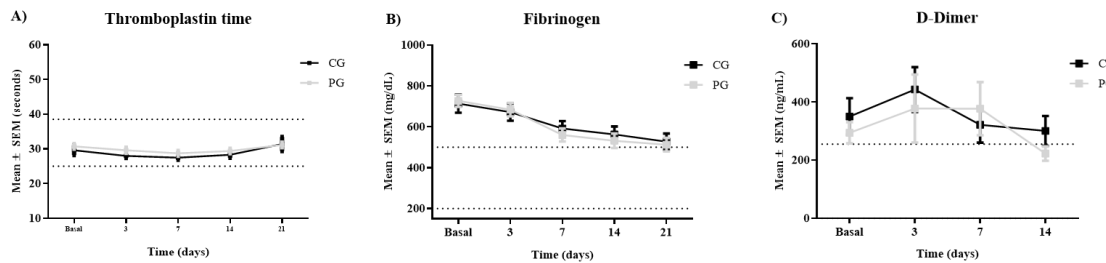


Figure S2. Changes in hematology parameters from baseline to the end of the follow-up period (baseline, 3, 7, 14, 21) in control group (CG) and plasma group (PG). Lines represent the mean \pm SEM of the following parameters in each previous mentioned time point: (A) thromboplastin time (seconds), (B) fibrinogen (mg/dL), and (C) D-dimer (ng/mL).

Biochemistry

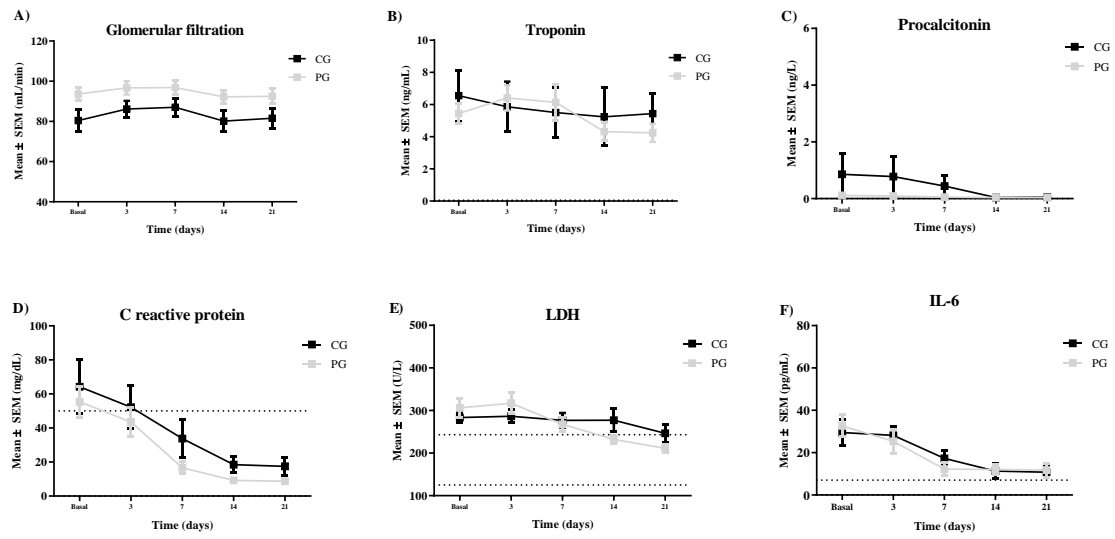


Figure S3. Changes in hematimetry parameters from baseline to the end of the follow-up period (baseline, 3, 7, 14, 21) in control group (CG) and plasma group (PG). Lines represent the mean \pm SEM of the following parameters in each previous mentioned time point: (A) glomerular filtration (mL/min), (B) troponin (ng/mL), (C) procalcitonin (ng/L), (D) C reactive protein (mg/dL), and (E) LDH (U/L), (F) IL-6 pg/mL).

Immunity

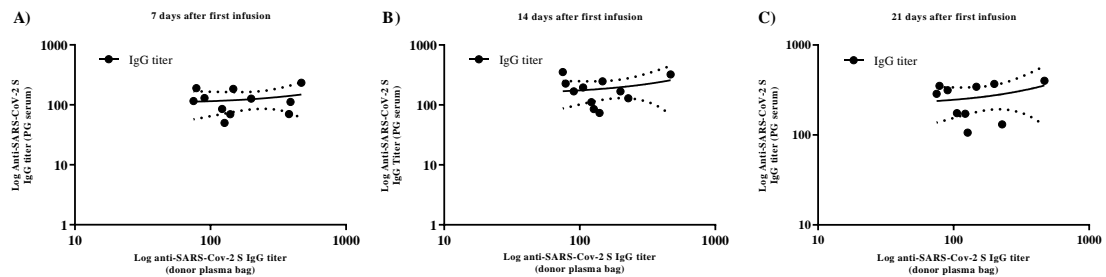


Figure S4. Correlation between the levels of anti-SARS-CoV-2 S IgG titers (UA/mL) in PG serum vs. donor plasma bag received at: (A) 7, (B) 14, and (C) 21 days after the last infusion. Correlation performed by Pearson test, $p > 0.05$, $r^2 < 0.05$.

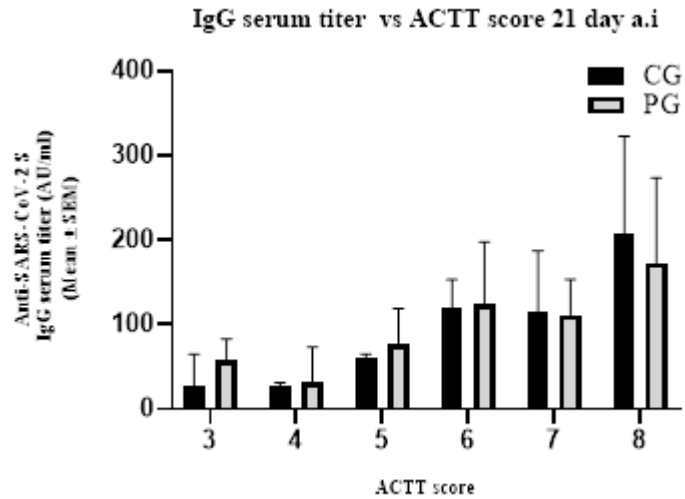


Figure S5. Correlation between the levels of anti-SARS-CoV-2 S IgG titers (UA/mL) in control (CG) and plasma group (PG) serum vs. ACTT score at 21 days after the first infusion (a.i). There were no statistical differences ($F(5, 54) = 0.38, p > 0.05$) by two-way ANOVA followed by the Tukey post hoc test.

Table S1. Standard therapy used in control (CG) $n = 17$ and plasma group (PG) $n = 37$. Type of medication classified by their function, specific drugs administered with distribution in frequency and percentage. χ^2 test was performed to assess statistical differences between drugs and groups.

| Type of Medication | Drugs | CG <i>n</i> (%) | PG <i>n</i> (%) | <i>p</i> -Value |
|--------------------------------------|-----------------------------|--------------------|--------------------|-----------------|
| Antiaggregant | heparin | 5 (29.41) | 13 (35.14) | $p > 0,05$ |
| | enoxaparin | | | |
| Antibiotics | ceftriaxone | 5 (29.34) | 17 (45.95) | $p > 0,05$ |
| | amoxiciliin-clavulanic acid | | | |
| Anti-inflammatory immunosupressor | desametaxone | 13 (76.47) | 32 (86.5) | $p > 0,05$ |
| | methylprednisolone | | | |
| Antivirals | lopinavir/ritonavir | 6 (35.29) | 12 (32.43) | $p > 0,05$ |
| | remdesivir | | | |
| Oxygentherapy | | 11 (64.71) | 20 (54.05) | $p > 0,05$ |

Table S2. Monitoring procedures and measures carried out during the follow-up period.

| Procedures | Follow-up day | | | | | | |
|---|-----------------|---|---|---|---|----|----|
| | Screening/Basal | 1 | 2 | 3 | 7 | 14 | 21 |
| Medical history review and physical exploration | x | x | x | x | x | x | x |
| Signed informed consent form/randomization | x | | | | | | |
| Vital sings | x | x | | x | x | x | x |
| Weight. Height. BMI | x | x | | x | x | x | x |
| ACTT scale | x | x | | x | x | x | x |
| ABO/Rh Group | x | | | | | | |
| Hematrimetry | x | x | | x | x | x | x |
| Coagulation | x | x | | x | x | x | x |
| Biochemistry | x | x | | x | x | x | x |
| Serology IgG anti-SARS-CoV-2 | x | | | x | x | x | x |
| RT-PCR RNA S protein SARS-CoV-2 | x | | | x | x | x | x |
| Advers effects | | | | x | x | x | x |
| Concomitant Review and Clinical Response | x | | | x | x | x | x |

Table S3. Grades and meanings in the Adaptive COVID-19 Treatment Trial Scale (ACTT-Scale) version II for COVID-19 disease used in the present trial following the Remdesivir Trial and the guidelines of the National Institute of Allergy and Infectious Disease of the United States (NIAID) [15]. Scores considered as clinical improvement are marked in bold.

| Scale | Grade | Meaning |
|-----------------|-------|--|
| ACTT-version II | 1 | Death |
| | 2 | Hospitalized. on invasive mechanical ventilation or extracorporeal membrane oxygenation (ECMO) |
| | 3 | Hospitalized. on non-invasive ventilation or high flow oxygen devices |
| | 4 | Hospitalized. requiring supplemental oxygen |
| | 5 | Hospitalized. not requiring supplemental oxygen - requiring ongoing medical care (COVID-19 related or otherwise) |
| | 6 | Hospitalized. not requiring supplemental oxygen - no longer requires ongoing medical care |
| | 7 | Not hospitalized. limitation on activities and/or requiring home oxygen |
| | 8 | Not hospitalized. no limitations on activities |

Table S4. Comorbidities in control (CG) and plasma group (PG), with type of diseases and specific diseases, in frequency and percentage.

| Type of disease | Disease | CG (<i>n</i> = 17) | | PG (<i>n</i> = 37) | |
|---------------------------------------|---------------------------------|---------------------|------|---------------------|------|
| | | n | % | n | % |
| Cardiac diseases | arterial hypertension | 11 | 64.7 | 26 | 70.3 |
| | heart disease | 4 | 23.5 | 2 | 5.4 |
| | auricular fibrillation | 1 | 5.9 | 4 | 10.8 |
| | TOTAL | 16 | 94.1 | 32 | 86.5 |
| Respiratory diseases | ASMA | 4 | 23.5 | 5 | 13.5 |
| | Sleep apnea | 1 | 5.9 | 2 | 5.4 |
| | EPOC | 1 | 5.9 | 3 | 8.1 |
| | TOTAL | 6 | 35.3 | 10 | 27.0 |
| Digestive diseases | gastritis | 2 | 11.8 | 2 | 5.4 |
| | gastroesophageal reflux disease | 1 | 5.9 | 1 | 2.7 |
| | TOTAL | 3 | 17.6 | 3 | 8.1 |
| Neurological diseases | migraine | 2 | 11.8 | 7 | 18.9 |
| | innespecific shaking | 1 | 5.9 | 0 | 0.0 |
| | parkinson | 1 | 5.9 | 0 | 0.0 |
| | dementia | 1 | 5.9 | 1 | 2.7 |
| | TOTAL | 5 | 29.4 | 8 | 21.6 |
| | depression | 2 | 11.8 | 1 | 2.7 |
| Psychiatric diseases | anxiety | 3 | 17.6 | 1 | 2.7 |
| | TOTAL | 5 | 29.4 | | 0.0 |
| Nephrological diseases | prostatic hyperplasia | 2 | 11.8 | 1 | 2.7 |
| | renal insuficiency | 1 | 5.9 | 7 | 18.9 |
| | TOTAL | 3 | 17.6 | 8 | 21.6 |
| Oftalmological diseases | eye infection | 1 | 5.9 | 1 | 2.7 |
| | glaucoma | 1 | 5.9 | 0 | 0.0 |
| | TOTAL | 2 | 11.8 | 1 | 2.7 |
| Dermatological diseases | psoriasis | 1 | 5.9 | 1 | 2.7 |
| | TOTAL | 1 | 5.9 | | 0.0 |
| Endocrinological diseases | dyslipidemia | 6 | 35.3 | 12 | 32.4 |
| | diabetes miellitus | 2 | 11.8 | 9 | 24.3 |
| | hypothyroidism | 1 | 5.9 | 3 | 8.1 |
| | obesity | 5 | 29.4 | 9 | 24.3 |
| | hypercholesterolemia | 1 | 5.9 | 3 | 8.1 |
| | TOTAL | 15 | 88.2 | 36 | 97.3 |
| Rheumatic and osteoarticular diseases | cervicoarthrosis | 1 | 5.9 | 0 | 0.0 |
| | ankylosing spondylitis | 1 | 5.9 | 1 | 2.7 |
| | spondyloarthrosis. dorsal | 1 | 5.9 | 1 | 2.7 |
| | hyperostosis | | | | |
| | osteoarthritis | 1 | 5.9 | 1 | 2.7 |
| | arthritis | 1 | 5.9 | 2 | 5.4 |
| | TOTAL | 5 | 29.4 | 5 | 13.5 |
| Immunitary diseases | Sjögren syndrome | 1 | 5.9 | 0 | 0.0 |
| | TOTAL | 1 | 5.9 | 0 | 0.0 |