Supplementary

The analogical scale for quality assessment

We worked using a standardized sheet to extract information on the first author, year of publication, country of the study group, retrospective or prospective design, sample size, primary and secondary outcomes, adverse events, other medical conditions and medications for the plasma group and the control. The next step is the quality assessment by five independent professionals using a visual analogical scale for each study assessment:



- Was the study described as randomized, a randomized trial, a randomized clinical trial, or an RCT?
- Was the method of randomization adequate (i.e., use of randomly generated assignment)
- Was the treatment allocation concealed (so that assignments could not be predicted)?
- Were study participants and providers blinded to treatment group assignment?
- Were the groups similar at baseline on important characteristics that could affect outcomes (e.g., demographics, risk factors, co-morbid conditions)?
- Was there high adherence to the intervention protocols for each treatment group?

Were other interventions avoided or similar in the groups (e.g., similar background treatments)?

PICO strategy table

P	COVID19 patients
I	Convalescent plasma transfusion
С	Control group which takes only standard treatment
О	Primary outcome is death among the two groups. Secondary outcome is the need
	of invasive ventilation

2.1 Inclusion and exclusion criteria and data extraction

The inclusion criteria are as follows:

- Only 2 armed studies
- signed informed consent;
- aged 18 years and higher;
- COVID-19 diagnosis based on polymerase chain reaction (PCR) testing.
- Radiologically pneumonia confirmed
- acceptance of random group assignment.
- no participation in other clinical trials, such as antiviral trials, during the study period.

Exclusion criteria:

- pregnancy or lactation;
- immunoglobulin allergy;
- IgA deficiency;
- preexisting comorbidity that could increase the risk of thrombosis.
- Life expectancy is less than 24 hours.
- disseminated intravascular coagulation;
- severe septic shock;
- PaO2/FIO2 of less than 100.
- severe congestive heart failure;
- detection of high titer of S protein–RBD-specific (receptor binding domain) IgG antibody (≥1:640);
- other contraindications as determined by the patient's physicians.

participation in any antiviral clinical trials for COVID-19 within 30 days prior to enrollment.

Prisma flowchart of the selected studies Exclusion of studies which, do not include Studies found on PubMed 401; convalescent plasma Cochrane library 1255, studies treatment in COVID 19 total 1656. (1009), duplicates (256) not include humans (81), not in English (310). Study excluded :1614 Number of studies after the title and abstract evaluation: 42 studies Studies excluded if they are not two armed (30), do not have a confirmed PCR Evaluation of full text studies diagnosis, confirmed pneumonia patients with (4), severe medical Number of final studies included in the conditions which led meta-analysis: 6 studies. to a life expectancy

less than 24 hours, pregnant or lactating woman. (2) Number of studies excluded 36