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Question: Should Convalescent plasma compared to standard plasma be used for COVID-19 patients?

Setting: Inpatient

| Certainty assessment | | | | | | | № of patients | | Effect | | Certainty |
|--|-------------------|----------------------|----------------------|--------------|---------------------------|----------------------|---------------------|-----------------|-----------------------------------|--|------------------|
| № of studies | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Convalescent plasma | Standard plasma | Relative (95% CI) | Absolute (95% CI) | |
| All-cause Mortality | | | | | | | | | | | |
| 2 ^{1,2} | randomised trials | serious ^a | serious ^b | not serious | serious ^c | none | 22/161 (13.7%) | 19/87 (21.8%) | RR 0.96 (0.17 to 5.27) | 9 fewer per 1.000 (from 181 fewer to 933 more) | ⊕○○○ VERY LOW |
| Progression of COVID-19 disease severity | | | | | | | | | | | |
| 2 ^{1,2} | randomised trials | serious ^a | not serious | not serious | serious ^c | none | 15/161 (9.3%) | 5/87 (5.7%) | RR 1.73 (0.65 to 4.59) | 42 more per 1.000 (from 20 fewer to 206 more) | ⊕⊕○○ LOW |
| Number of patients with any adverse event | | | | | | | | | | | |
| 1 ¹ | randomised trials | serious ^d | not serious | not serious | very serious ^e | none | 1/14 (7.1%) | 1/15 (6.7%) | RR 1.07 (0.07 to 15.54) | 5 more per 1.000 (from 62 fewer to 969 more) | ⊕○○○ VERY LOW |
| Duration of hospitalization | | | | | | | | | | | |
| 1 ¹ | randomised trials | serious ^d | not serious | not serious | very serious ^e | none | 14 | 15 | - | SMD 0.78 lower (1.54 lower to 0.02 lower) | ⊕○○○ VERY LOW |

Explanations

- a. Downgraded of one level for high risk of performance bias in one study and the other study at unclear risk for all considered bias
- b. Downgraded of one level for heterogeneity $I^2=62\%$
- c. Downgraded of one level for wide confidence interval
- d. Downgraded of one level for high risk of performance bias
- e. Downgraded of two levels for very small sample size

References

1. Bajpai M, Kumar S, Maheshwari A, Chhabra K, Kale P, Gupta A, et al. Efficacy of Convalescent Plasma Therapy compared to Fresh Frozen Plasma in Severely ill COVID-19 Patients: A Pilot Randomized Controlled Trial. medRxiv. 2020:2020.10.25.20219337.
2. O'Donnell MR, Grinsztejn B, Cummings MJ, Justman JE, Lamb MR, Eckhardt CM et al. A randomized double-blind controlled trial of convalescent plasma in adults with severe COVID-19. J Clin Invest. 2021 May doi: 10.1172/JCI150646. Epub ahead of print.