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Question: Should Methylprednisolone compared to Dexamethasone 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	Methylprednisolone	Dexamethasone	Relative (95% CI)	Absolute (95% CI)	
All-cause mortality											
1 ¹	randomised trials	serious ^a	not serious	not serious	very serious ^b	none	8/44 (18.2%)	15/42 (35.7%)	RR 0.51 (0.24 to 1.07)	175 fewer per 1.000 (from 271 fewer to 25 more)	⊕○○○ VERY LOW
Progression / exacerbation of lung disease on CT											
1 ¹	randomised trials	serious ^a	not serious	not serious	very serious ^b	none	8/44 (18.2%)	16/42 (38.1%)	RR 0.48 (0.23 to 1.00)	198 fewer per 1.000 (from 293 fewer to 0 fewer)	⊕○○○ VERY LOW
Length of stay in hospital											
1 ¹	randomised trials	serious ^a	not serious	not serious	very serious ^b	none	37	27	-	SMD 0.68 lower (1.19 lower to 0.17 lower)	⊕○○○ VERY LOW

Explanations

- a. Downgraded of one level for high risk of reporting bias
- b. Downgraded of two levels for very small sample size

References

1. Keivan R, Reza S, Amirhossein E, Zohre K, Mohammad Hasan Gholampoor S, Alireza M, et al. Methylprednisolone or Dexamethasone, Which One Is the Superior Corticosteroid in the Treatment of Hospitalized COVID-19 Patients: A Triple-Blinded Randomized Controlled Trial *BMC Infectious Diseases*. 2021. PREPRINT (Version 1) available at Research Square [<https://doi.org/10.21203/rs.3.rs-148529/v1>]