

Ribavirin + lopinavir ritonavir + interferon alfa compared to Ribavirin + Interferon alfa be used for COVID-19

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Question: Should Ribavirin + lopinavir / ritonavir + interferon alfa compared to Ribavirin + Interferon alfa be used for COVID-19?

Setting: Inpatient

Certainty assessment							№ of patients		Effect		Certainty
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Ribavirin + lopinavir / ritonavir + interferon alfa	to Ribavirin + Interferon alfa	Relative (95% CI)	Absolute (95% CI)	
All-cause mortality											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	No death reported				⊕⊕○○ LOW
SARS-CoV-2 clearance											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	15/32 (46.9%)	17/33 (51.5%)	RR 0.91 (0.55 to 1.49)	46 fewer per 1.000 (from 232 fewer to 252 more)	⊕⊕○○ LOW
Progression of COVID-19 disease											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	2/32 (6.3%)	1/33 (3.0%)	RR 2.06 (0.20 to 21.64)	32 more per 1.000 (from 24 fewer to 625 more)	⊕⊕○○ LOW
Number of patients with any adverse event											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	30/32 (93.8%)	23/33 (69.7%)	RR 1.35 (1.06 to 1.71)	244 more per 1.000 (from 42 more to 495 more)	⊕⊕○○ LOW
Number of patients with serious adverse events											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	No serious adverse event reported				⊕⊕○○ LOW
Time to SARS-CoV 2 clearance											
1 ¹	randomised trials	serious ^a	not serious	not serious	serious ^b	none	The study reports that the negative conversion time (SARS-CoV-2 clearance) from baseline to follow-up did not differ between the two HR groups: 1.39 (0.80,2.41)				⊕⊕○○ LOW

Explanations

- a. Downgraded of one level for high risk of performance bias
- b. Downgraded of one level for small sample size

References

1. Huang YQ, Tang SQ, Xu XL, et al. No Statistically Apparent Difference in Antiviral Effectiveness Observed Among Ribavirin Plus Interferon-Alpha, Lopinavir/Ritonavir Plus Interferon-Alpha, and Ribavirin Plus Lopinavir/Ritonavir Plus Interferon-Alpha in Patients With Mild to Moderate Coronavirus Disease 2019: Results of a Randomized, Open-Labeled Prospective Study. *Front Pharmacol.* 2020;11:1071. Published 2020 Jul 14. doi:10.3389/fphar.2020.01071