Novaferon vs. Lopinavir+Ritonavir for COVID-19

Author(s): Cruciani F, De Crescenzo F, Vecchi S, Saulle R, Mitrova Z, Amato L, Davoli M.
Question: Should Novaferon versus Lopinavir/Ritonavir 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	Novaferon	Lopinavir/Ritonavir	Relative (95% CI)	Absolute (95% CI)	
SARS-CoV-2 clearance											
1 [1,a]	randomised trials	serious [b]	not serious	not serious	very serious [c]	none	17/30 (56.7%)	15/29 (51.7%)	**RR 1.10** (0.68 to 1.75)	**52 more per 1.000** (from 166 fewer to 388 more)	⨁◯◯◯ VERY LOW
Progression of COVID-19 severity											
1 [1]	randomised trials	serious [b]	not serious	not serious	very serious [c]	none	0/28 (0.0%)	4/28 (14.3%)	**RR 0.11** (0.01 to 1.97)	**127 fewer per 1.000** (from 141 fewer to 139 more)	⨁◯◯◯ VERY LOW
Number of patients with adverse events											
1 [1]	randomised trials	serious [b]	not serious	not serious	very serious [c]	none	0/30 (0.0%)	4/29 (13.8%)	**RR 0.11** (0.01 to 1.91)	**123 fewer per 1.000** (from 137 fewer to 126 more)	⨁◯◯◯ VERY LOW
Number of patients with severe adverse events											
1 [1]	randomised trials	serious [b]	not serious	not serious	very serious [c]	none	No serious adverse event in both groups				⨁◯◯◯ VERY LOW

CI: Confidence interval; **RR:** Risk ratio

Explanations

a. * The study authors define Novaferon as a recombinant antitumor and antiviral protein
b. Downgraded of one level for high risk of performance bias and unclear risk of selection bias
c. Downgraded of two levels for very few events and small sample size

References

1. Zheng F, Zhou Y, Zhou Z, et al. SARS-CoV-2 clearance in COVID-19 patients with Novaferon treatment: A randomized, open-label, parallel-group trial [published online ahead of print, 2020 Aug 3]. Int J Infect Dis. 2020;99:84-91. doi:10.1016/j.ijid.2020.07.053