

## Recombinant Human Granulocyte Colony–Stimulating Factor (rhG-CSF) vs Standard treatment for COVID-19

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**Question:** Should Recombinant Human Granulocyte Colony–Stimulating Factor (rhG-CSF) compared to Standard treatment 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	Recombinant Human Granulocyte Colony–Stimulating Factor (rhG-CSF)	Standard treatment	Relative (95% CI)	Absolute (95% CI)	

### All-cause mortality at 28 days

1 <sup>1</sup>	randomised trials	serious <sup>a</sup>	not serious	not serious	not serious	none	3/100 (3.0%)	12/100 (12.0%)	<b>RR 0.25</b> (0.07 to 0.86)	<b>90 fewer per 1.000</b> (from 112 fewer to 17 fewer)	⊕⊕⊕○ MODERATE
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### Progression of disease severity

1 <sup>1</sup>	randomised trials	serious <sup>a</sup>	not serious	not serious	not serious	none	2/100 (2.0%)	15/100 (15.0%)	<b>RR 0.13</b> (0.03 to 0.57)	<b>131 fewer per 1.000</b> (from 146 fewer to 65 fewer)	⊕⊕⊕○ MODERATE
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### Number of patients with any adverse event

1 <sup>1</sup>	randomised trials	serious <sup>a</sup>	not serious	not serious	not serious	none	91/98 (92.9%)	47/102 (46.1%)	<b>RR 2.02</b> (1.62 to 2.50)	<b>470 more per 1.000</b> (from 286 more to 691 more)	⊕⊕⊕○ MODERATE
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### Number of patients with serious adverse events

1 <sup>1</sup>	randomised trials	serious <sup>a</sup>	not serious	not serious	not serious	none	29/98 (29.6%)	42/102 (41.2%)	<b>RR 0.72</b> (0.49 to 1.05)	<b>115 fewer per 1.000</b> (from 210 fewer to 21 more)	⊕⊕⊕○ MODERATE
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### Explanations

a. Downgraded of one level for high risk of performance bias

### References

1. Cheng LL, Guan WJ, Duan CY, et al. Effect of Recombinant Human Granulocyte Colony-Stimulating Factor for Patients With Coronavirus Disease 2019 (COVID-19) and Lymphopenia: A Randomized Clinical Trial [published online ahead of print, 2020 Sep 10]. *JAMA Intern Med.* 2020;10.1001/jamainternmed.2020.5503. doi:10.1001/jamainternmed.2020.5503