

**Table 1.** GRADE Evidence Profile: In patients hospitalized with severe or critical COVID-19 receiving systemic glucocorticoids, should abatacept compared to no abatacept be added to standard care?

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	abatacept	no abatacept	Relative (95% CI)	Absolute (95% CI)		
Mortality (follow-up: 28 days)												
1 [O'Halloran 2023]	randomized trials	not serious	not serious	not serious <sup>i</sup>	very serious <sup>a,b</sup>	none	56/509 (11%)	77/510 (15.1%)	RR 0.73 (0.53 to 1.01) <sup>c</sup>	41 fewer per 1,000 (from 71 fewer to 2 more)	⊕⊕○○ Low <sup>a,b</sup>	CRITICAL
Recovery (follow-up: 28 days; assessed with: first day a hospitalized participant did not require oxygen or on-going care or patient was not hospitalized with or without limitations on activities) <sup>d</sup>												
1 [O'Halloran 2023]	randomized trials	not serious	not serious	not serious <sup>i</sup>	serious <sup>e</sup>	none	414/524 (79.0%)	397/525 (75.6%)	HR 1.12 (0.98 to 1.28) <sup>f</sup>	38 more per 1,000 (from 7 fewer to 80 more)	⊕⊕⊕○ Moderate <sup>e</sup>	CRITICAL
Serious adverse events (assessed with: death, life-threatening AE, new/prolonged hospitalization, persistent/significant incapacity/substantial disruption of normal life functions, congenital anomaly/birth defect)												
1 [O'Halloran 2023]	randomized trials	not serious	not serious	not serious <sup>i</sup>	very serious <sup>g</sup>	none	128/509 (25.1%)	136/510 (26.7%)	RR 0.94 (0.77 to 1.16) <sup>h</sup>	16 fewer per 1,000 (from 61 fewer to 43 more)	⊕⊕○○ Low <sup>g</sup>	CRITICAL

CI: confidence interval; HR: hazard ratio; RR: risk ratio

### Explanations

- 95% CI cannot exclude the potential for no mortality benefits.
- Events do not meet optimal information size and suggests fragility in the estimate.
- OR in O'Halloran was 0.62 (0.41-0.94). Analyzed as binary endpoints using a logistic regression model with an indicator variable for treatment group, geographic region, baseline disease severity on the 8-point ordinal scale, age, and sex
- Equivalent to categories 6, 7, or 8 on the study's 8-point ordinal scale.
- 95% CI cannot exclude no meaningful difference in recovery.

- f. Recovery rate ratio (RRR), similar to a hazard ratio.
- g. 95% CI cannot exclude the potential for harms for total SAEs or SAEs related to abatacept.
- h. All SAEs reported. SAEs reported by site PIs as related to the study drug: abatacept = 9/509, placebo = 7/510 (RR=1.29; 95% CI: 0.48, 3.43).
- i. O'Halloran included patients 18 years or older