Supplementary Material

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Contents

Data extraction

In this section, we will elaborate the details underlying our data extraction process.

We pre-registered our protocol in the OpenScienceFramework (https://osf.io/cytq8/). In brief, we extracted summary data from randomized controlled trials (RCT) included in a living systematic review on Cochrane. We accessed each individual RCT manuscript to extract data. We contacted the authors by e-mail to obtain relevant data not available in the manuscript. However, we did not have success to obtain any extra information by e-mail.

The tables below show what studies were included and excluded. We will also show the direct source (Figure/Table) of the extracted data in each RCT. Lastly, we show relevant notes about details from each study and why we did not extract data from certain RCTs that were included in the living systematic.

The diagram below show the workflow regarding studies that were used to create prior distributions.

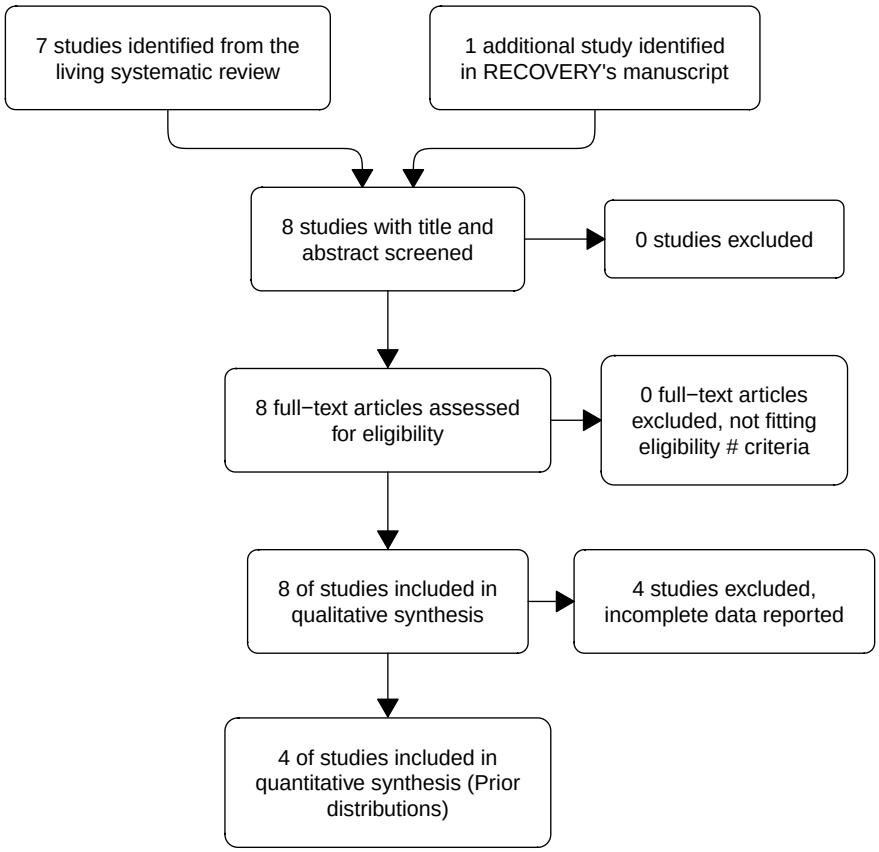


Table 1: Included studies for the mortality outcome

Study	Source	Notes
Not using corticosteroids		
RECOVERY	Figure 3	"Use of corticosteroids" section
COVACTA	Table S10	Ordinal category 7 means death.
REMAP-CAP	Figure 9	Full explanation in another section of this supplementary material
Using corticosteroids		
RECOVERY	Figure 3	"Use of corticosteroids" section
COVACTA	Table S10	Ordinal category 7 means death.
REMAP-CAP	Figure 9	Full explanation in another section of this supplementary material
Simple oxygen only		
RECOVERY	Figure 3	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 3 means "non–ICU hospitalization with supplemental oxygen". Thus, Category 3 at baseline equals to the "simple oxygen only" subgroup. Ordinal Category 7 means death.
CORIMUNO-19	Table 2	This study only included patients "...receiving at least 3L/min oxygen (O2) but without high-flow oxygen (HFO)...". Thus, we included all data available.
Non-invasive ventilation		
RECOVERY	Figure 3	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 4 means "ICU or non–ICU hospitalization with noninvasive ventilation or high-flow oxygen". Thus, Category 4 at baseline equals to the "non-invasive ventilation" subgroup. Ordinal Category 7 means death.
REMAP-CAP	Table S7	"Progression to invasive mechanical ventilation, ECMO or death, restricted to those not intubated at baseline" section
Salvarini	Table 2	This study only included patients "Patients at enrollment were allowed to receive oxygen therapy with Venturi mask or high-flow nasal cannula with recorded and preset FIO2...". Thus, we included all data available.
Invasive mechanical ventilation		
RECOVERY	Figure 3	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 5 means "ICU hospitalization with mechanical ventilation" and category 6 means "ICU hospitalization with extracorporeal membrane oxygenation or mechanical ventilation and additional organ support". Thus, both categories combined equals to the "invasive mechanical ventilation" subgroup. Ordinal Category 7 means death.
REMAP-CAP	Table 2 and Table S7	Table S7 shows how many patients that were free of IMV at baseline died (53 and 82) and their sample size (242 + 273). Table 2 shows total number of deaths (98 and 142) and total sample size (350 + 397). Thus, we subtracted values between tables to get how many patients on IMV at baseline died and sample size.

Table 2: Included studies for the hospital discharge outcome

Study	Source	Notes
Not using corticosteroids		
RECOVERY	Webfigure 1	"Use of corticosteroids" section
COVACTA	Table S10	Ordinal category 1 means "discharged or ready for discharge"
Using corticosteroids		
RECOVERY	Webfigure 1	"Use of corticosteroids" section
COVACTA	Table S10	Ordinal category 1 means "discharged or ready for discharge"
Simple oxygen only		
RECOVERY	Webfigure 1	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 3 means "non–ICU hospitalization with supplemental oxygen". Thus, Category 3 at baseline equals to the "simple oxygen only" subgroup. Ordinal Category 7 means "discharged or ready for discharge".
CORIMUNO-19	eTable 9	This study only included patients "...receiving at least 3L/min oxygen (O2) but without high-flow oxygen (HFO)...". Thus, we included all data available.
Non-invasive ventilation		
RECOVERY	Webfigure 1	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 4 means "ICU or non–ICU hospitalization with noninvasive ventilation or high-flow oxygen". Thus, Category 4 at baseline equals to the "non-invasive ventilation" subgroup. Ordinal Category 7 means "discharged or ready for discharge".
Salvarini	Table 2	This study only included patients "Patients at enrollment were allowed to receive oxygen therapy with Venturi mask or high-flow nasal cannula with recorded and preset FIO2...". Thus, we included all data available.
Invasive mechanical ventilation		
RECOVERY	Webfigure 1	"Respiratory support at randomisation" section
COVACTA	Figure 2	Ordinal category 5 means "ICU hospitalization with mechanical ventilation" and category 6 means "ICU hospitalization with extracorporeal membrane oxygenation or mechanical ventilation and additional organ support". Thus, both categories combined equals to the "invasive mechanical ventilation" subgroup. Ordinal Category 7 means "discharged or ready for discharge".

Table 3: Excluded studies for the mortality outcome

Study	Notes
Use of corticosteroids subgroups	
TOCIBRAS	Not possible to extract data per subgroup
Stone	Not possible to extract data per subgroup
EMPACTA	Not possible to extract data per subgroup
COVINTOC	Not reported
Respiratory support subgroups	
TOCIBRAS	Not possible to extract data per subgroup
Stone	Not possible to extract data per subgroup
EMPACTA	Not possible to extract data per subgroup
COVINTOC	Not possible to extract data per subgroup

Table 4: Excluded studies for the hospital discharge outcome

Study	Notes
Use of corticosteroids subgroups	
REMAP-CAP	Not reported
TOCIBRAS	Not possible to extract data per subgroup
Stone	Not possible to extract data per subgroup
EMPACTA	Not possible to extract data per subgroup
COVINTOC	Not reported
Respiratory support subgroups	
REMAP-CAP	Not possible to extract data per subgroup
TOCIBRAS	Not possible to extract data per subgroup
Stone	Not possible to extract data per subgroup
EMPACTA	Not possible to extract data per subgroup
COVINTOC	Not reported

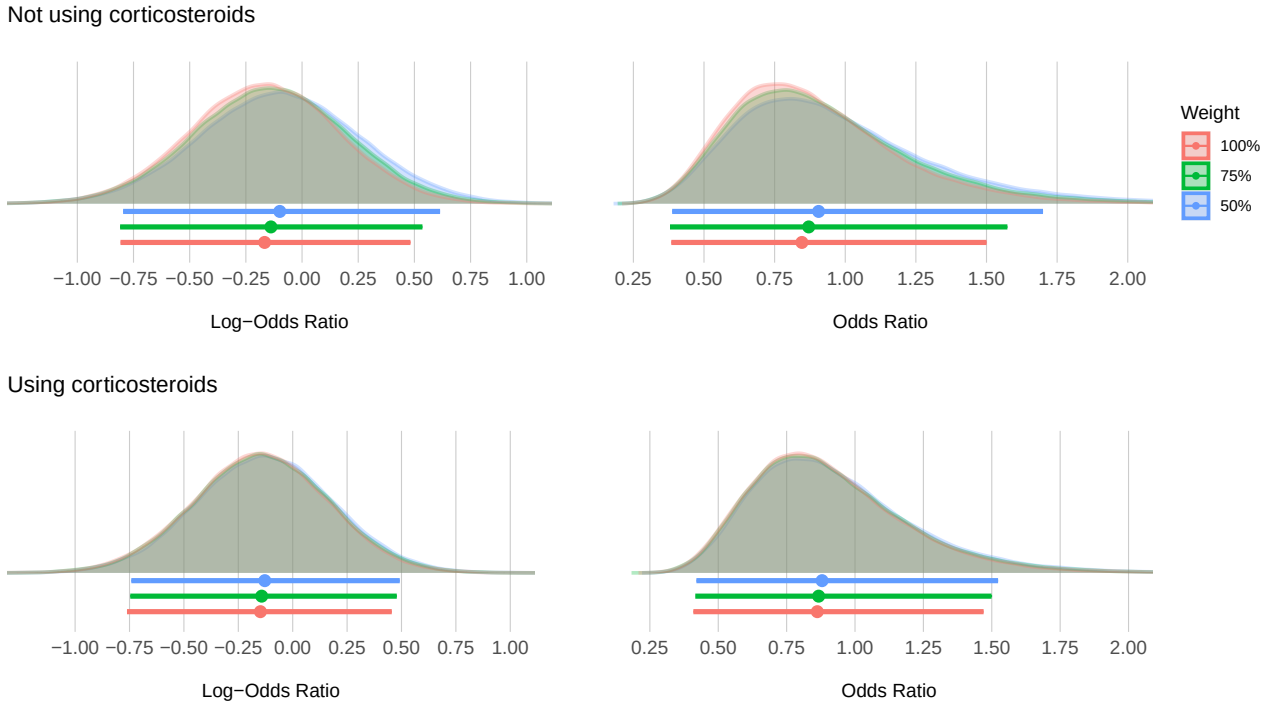
As mentioned in the tables above, we will now discuss further details about data on the use of corticosteroids subgroups from REMAP-CAP.

The relevant data from these subgroups are shown in Figure 9 in their supplementary material. Unfortunately, the authors do not provide the raw number of events per subgroup. Instead, the data is displayed visually in stacked bars. Thus, we used the {juicr} package to extract data directly from Figure 9. The raw data and extraction report generated by {juicr} can be found in this project's GitHub repository.

Of note, REMAP-CAP was a three-arm randomized controlled trial that tested tocilizumab and sarilumab (both are IL-6 antagonists) vs. usual care. The authors only provided pooled data from these IL-6 antagonists vs. usual care in Figure 9. Thus, we decided to perform sensitivity analyses with this data to dampen the influence of sarilumab in final results.

We created evidence-based priors for these subgroups using data from REMAP-CAP with different weights: 100%, 75% and 50%. This approach implies that the numbers of events and sample sizes from REMAP-CAP were multiplied by 1, 0.75 or 0.5, respectively.

As mentioned in the Methods section, we pooled data from similar studies with a random-effect meta-analysis using a restricted maximum-likelihood estimator to create evidence-based priors. We will now display evidence-based prior distributions for both "Not using corticosteroids" and "Using corticosteroids" subgroups that were generated with different weights on REMAP-CAP. Top panels regards "Not using corticosteroids" and the bottom panels "Using corticosteroids". We show these distributions in both log-odds ratio and odds ratio scales to ease interpretation.



Point estimates depict the median and interval bars depict the 95% highest density interval.

Because prior distributions are notably similar regardless of the weight used, we have decided to only use the ones with 100% weight for our analyses.

Overall characteristics

Table 5: Overall characteristics of included studies

Study Characteristic	
RECOVERY	
Year	2021
Trial design	Open-label
Follow-up period (days)	28
Control treatment	Standard of care
COVACTA	
Year	2021
Trial design	Double-blinded
Follow-up period (days)	28
Control treatment	Placebo
REMAP-CAP	
Year	2021
Trial design	Open-label
Follow-up period (days)	21
Control treatment	Standard of care
CORIMUNO-19	
Year	2020
Trial design	Open-label
Follow-up period (days)	28
Control treatment	Standard of care
Salvarini	
Year	2020
Trial design	Open-label
Follow-up period (days)	30
Control treatment	Standard of care

Table 6: Patient characteristics of included studies (Filled circles indicate what subgroups from each trial were used for outcome analyses)

Study Characteristic	Interventions		Outcomes	
	Control	Tocilizumab	Mortality	Hospital Discharge
RECOVERY				
Number of patients	2094	2022		
Age (SD)	64 (14)	63 (14)		
Male sex (%)	69	66		
Confirmed SARS-CoV-2 infection (%)	96	95		
Use of corticosteroids (%)	82	82	●	●
Simple oxygen only at randomisation (%)	45	46	●	●
Non-invasive ventilation at randomisation (%)	41	41	●	●
Invasive mechanical ventilation at randomisation (%)	14	13	●	●
COVACTA				
Number of patients	144	294		
Age (SD)	61 (14)	60 (15)		
Male sex (%)	70	70		
Confirmed SARS-CoV-2 infection (%)	100	100		
Use of corticosteroids (%)	28.5	19	●	●
Simple oxygen only at randomisation (%)	31	26.5	●	●
Non-invasive ventilation at randomisation (%)	27	32	●	●
Invasive mechanical ventilation at randomisation (%)	38	38	●	●
REMAP-CAP				
Number of patients	402	353		
Age (SD)	61 (13)	61 (12)		
Male sex (%)	70	74		
Confirmed SARS-CoV-2 infection (%)	85	82		
Use of corticosteroids (%)	> 80	> 80	●	○
Simple oxygen only at randomisation (%)	< 1	< 1	○	○
Non-invasive ventilation at randomisation (%)	69	71	●	○
Invasive mechanical ventilation at randomisation (%)	30	29	●	○
CORIMUNO				
Number of patients	67	63		
Age (IQR)	63 (57 - 72)	64 (57 - 74)		
Male sex (%)	66	70		
Confirmed SARS-CoV-2 infection (%)	90	89		
Use of corticosteroids (%)	61	33	○	○
Simple oxygen only at randomisation (%)	100	100	●	●
Non-invasive ventilation at randomisation (%)	0	0	○	○
Invasive mechanical ventilation at randomisation (%)	0	0	○	○
Salvarini				
Number of patients	62	60		
Age (IQR)	60 (54 - 69)	61 (51 - 73)		
Male sex (%)	56	67		
Confirmed SARS-CoV-2 infection (%)	100	100		
Use of corticosteroids (%)	11	10	○	○
Simple oxygen only at randomisation (%)	0	0	○	○
Non-invasive ventilation at randomisation (%)	100	100	●	●
Invasive mechanical ventilation at randomisation (%)	0	0	○	○

Results: Mortality outcome

Prior, RECOVERY, and Posterior distributions

Supplementary Table 1

Distribution	95% Highest Density Interval		
	Median	Lower limit	Upper limit
Not using corticosteroids			
Prior	0.85	0.45	1.62
RECOVERY	1.20	0.89	1.64
Posterior	1.13	0.86	1.48
Using corticosteroids			
Prior	0.86	0.47	1.58
RECOVERY	0.76	0.66	0.88
Posterior	0.77	0.67	0.88
Simple oxygen only			
Prior	1.35	0.48	3.68
RECOVERY	0.80	0.64	1.00
Posterior	0.82	0.66	1.02
Non-invasive ventilation			
Prior	0.65	0.45	0.93
RECOVERY	0.83	0.69	1.02
Posterior	0.79	0.66	0.93
Invasive mechanical ventilation			
Prior	0.86	0.57	1.32
RECOVERY	0.93	0.67	1.29
Posterior	0.91	0.70	1.18

95% highest density intervals of evidence-based prior, RECOVERY, and posterior distributions. This table complements Figure 1.

Posterior probabilities using evidence-based priors

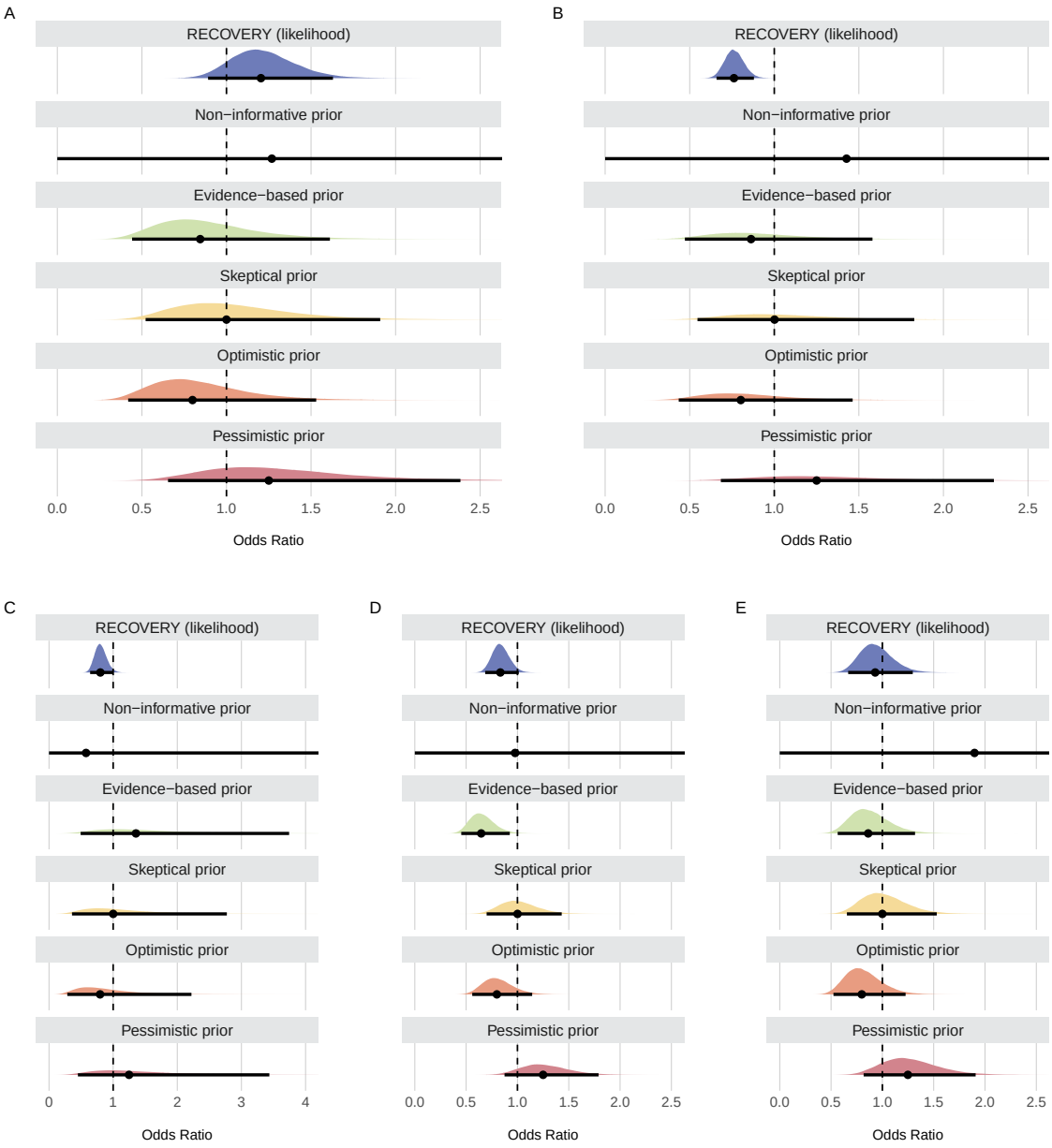
Supplementary Table 2

Subgroup	95% Highest Density Interval			Probability of Risk Difference ≥ X%			
	Median	Lower limit	Upper limit	Pr(≥ 0%)	Pr(≥ 1%)	Pr(≥ 2%)	Pr(≥ 5%)
Use of corticosteroids							
Not using	-2.8	-9.2	3.5	18.9	11.5	6.3	0.6
Using	5.8	2.8	8.6	100.0	99.9	99.3	69.4
Respiratory support							
Simple oxygen only	3.3	-0.2	6.7	96.2	89.7	76.6	16.0
Non-invasive ventilation	5.7	1.7	9.6	99.7	98.9	96.4	64.2
Invasive mechanical ventilation	2.5	-4.1	8.9	77.3	67.3	55.8	22.4

95% highest density intervals and posterior probabilities of benefit. This table complements Figure 2.

Sensitivity analyses using different priors

Supplementary Figure 1



Prior distributions for each subgroup.

Panel A shows results for patients not using corticosteroids; Panel B shows results for patients using corticosteroids.

Panel C shows results for simple oxygen only; Panel D shows results for non-invasive ventilation; Panel E shows results for invasive mechanical ventilation.

Point estimates depict the median and interval bars depict 95th quantile intervals.

Supplementary Table 3

Underlying Prior	95% Highest Density Interval		
	Median	Lower limit	Upper limit
Not using corticosteroids			
Evidence-based	-2.8	-9.2	3.5
Non-informative	-4.3	-11.5	2.7
Skeptical	-3.5	-10.1	2.7
Optimistic	-2.6	-9.2	3.6
Pessimistic	-4.5	-11.0	1.9
Using corticosteroids			
Evidence-based	5.8	2.8	8.6
Non-informative	5.9	2.9	8.8
Skeptical	5.6	2.6	8.4
Optimistic	5.9	3.0	8.8
Pessimistic	5.4	2.4	8.3
Simple oxygen only			
Evidence-based	3.3	-0.2	6.7
Non-informative	3.7	0.1	7.0
Skeptical	3.5	0.0	6.8
Optimistic	3.7	0.2	6.9
Pessimistic	3.4	-0.1	6.7
Non-invasive ventilation			
Evidence-based	5.7	1.7	9.6
Non-informative	4.4	-0.2	8.9
Skeptical	3.4	-0.7	7.4
Optimistic	4.6	0.5	8.4
Pessimistic	2.2	-2.0	6.3
Invasive mechanical ventilation			
Evidence-based	2.5	-4.1	8.9
Non-informative	1.8	-6.4	10.0
Skeptical	1.1	-5.4	7.6
Optimistic	3.2	-3.2	9.7
Pessimistic	-1.0	-7.4	5.5

Median and 95% highest density intervals of posteriors distributions from sensitivity analyses with different priors. This table complements Figure 3.

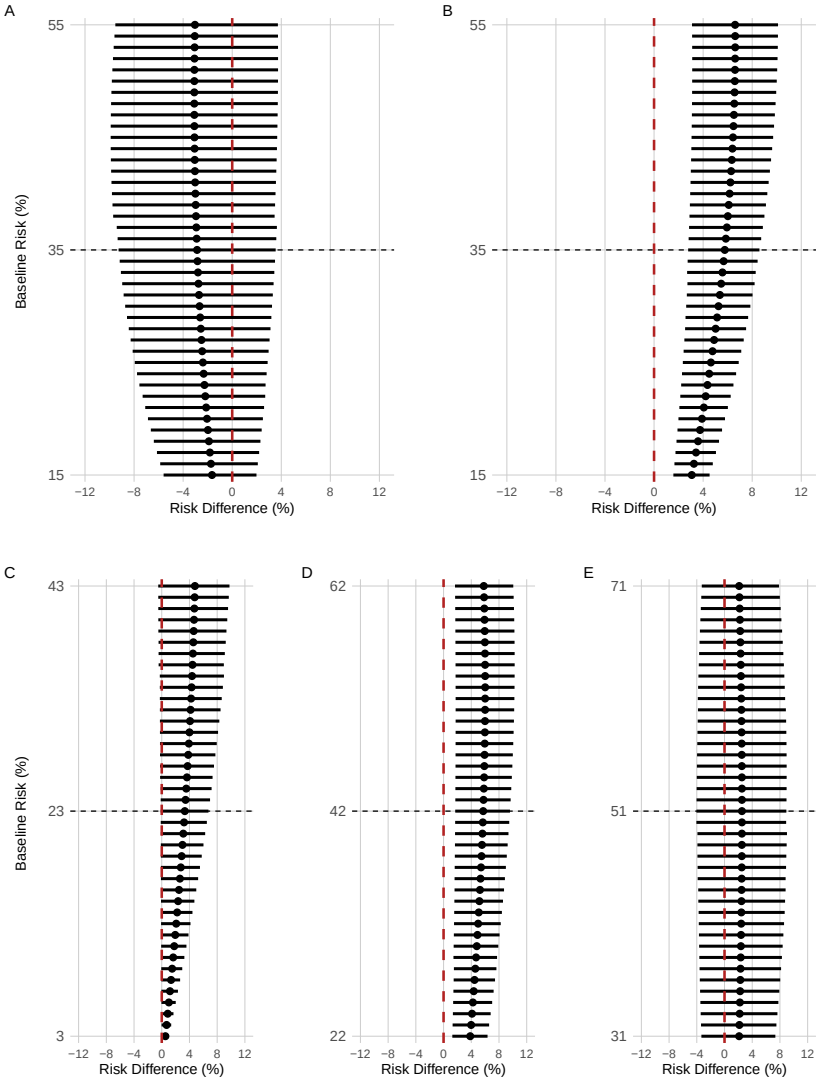
Supplementary Table 4

	Propability of Harm			Probability of Benefit			
Underlying Prior	Pr(< -5%)	Pr(< -2%)	Pr(< -1%)	Pr(> 0%)	Pr(> 1%)	Pr(> 2%)	Pr(> 5%)
Not using corticosteroids							
Evidence-based	25.5	59.9	71.4	18.9	11.5	6.3	0.6
Non-informative	42.9	74.2	82.3	11.4	6.8	3.7	0.4
Skeptical	32.8	68.0	78.3	13.6	7.9	4.0	0.3
Optimistic	23.4	57.4	69.0	20.8	12.9	7.3	0.8
Pessimistic	43.8	77.6	85.8	8.3	4.4	2.1	0.1
Using corticosteroids							
Evidence-based	0.0	0.0	0.0	100.0	99.9	99.3	69.4
Non-informative	0.0	0.0	0.0	100.0	99.9	99.3	72.0
Skeptical	0.0	0.0	0.0	100.0	99.9	99.0	65.4
Optimistic	0.0	0.0	0.0	100.0	99.9	99.4	71.6
Pessimistic	0.0	0.0	0.0	100.0	99.8	98.6	59.4
Simple oxygen only							
Evidence-based	0.0	0.3	1.1	96.2	89.7	76.6	16.0
Non-informative	0.0	0.2	0.8	97.4	92.6	82.2	22.4
Skeptical	0.0	0.2	0.8	97.2	91.9	80.3	19.2
Optimistic	0.0	0.1	0.6	97.8	93.2	83.0	21.6
Pessimistic	0.0	0.2	1.0	96.6	90.4	77.7	16.7
Non-invasive ventilation							
Evidence-based	0.0	0.0	0.1	99.7	98.9	96.4	64.2
Non-informative	0.0	0.4	1.3	96.7	92.1	84.0	39.1
Skeptical	0.0	0.6	1.9	94.6	87.3	74.7	21.9
Optimistic	0.0	0.1	0.4	98.6	95.7	89.3	41.8
Pessimistic	0.0	2.6	6.8	84.5	70.7	52.9	8.5
Invasive mechanical ventilation							
Evidence-based	1.2	8.9	14.7	77.3	67.3	55.8	22.4
Non-informative	5.2	18.3	25.2	66.7	57.6	48.1	22.4
Skeptical	3.3	17.5	26.3	63.1	51.3	39.6	12.0
Optimistic	0.7	5.8	10.2	83.3	74.6	64.1	29.6
Pessimistic	11.4	38.3	50.2	38.0	27.2	18.2	3.5

Posterior probabilities from sensitivity analyses using different priors. This table complements Figure 3.

Sensitivity analyses using different baseline risks

Supplementary Figure 2



Posterior distributions from sensitivity analyses using multiple different baseline risks.

Each line represents posterior distribution for the corresponding baseline risk. Horizontal black dashed lines represent the respective baseline risk underlying other analyses (Figure 2), i.e., risk in the control group in the RECOVERY trial for each subgroup (Table 1). Vertical red dashed line represent 0% risk difference. Point estimates depict the median and interval bars depict 95% highest density intervals.

Panel A shows results for patients not using corticosteroids; Panel B shows results for patients using corticosteroids. Panel C shows results for simple oxygen only; Panel D shows results for non-invasive ventilation; Panel E shows results for invasive mechanical ventilation.

Results: Hospital discharge outcome

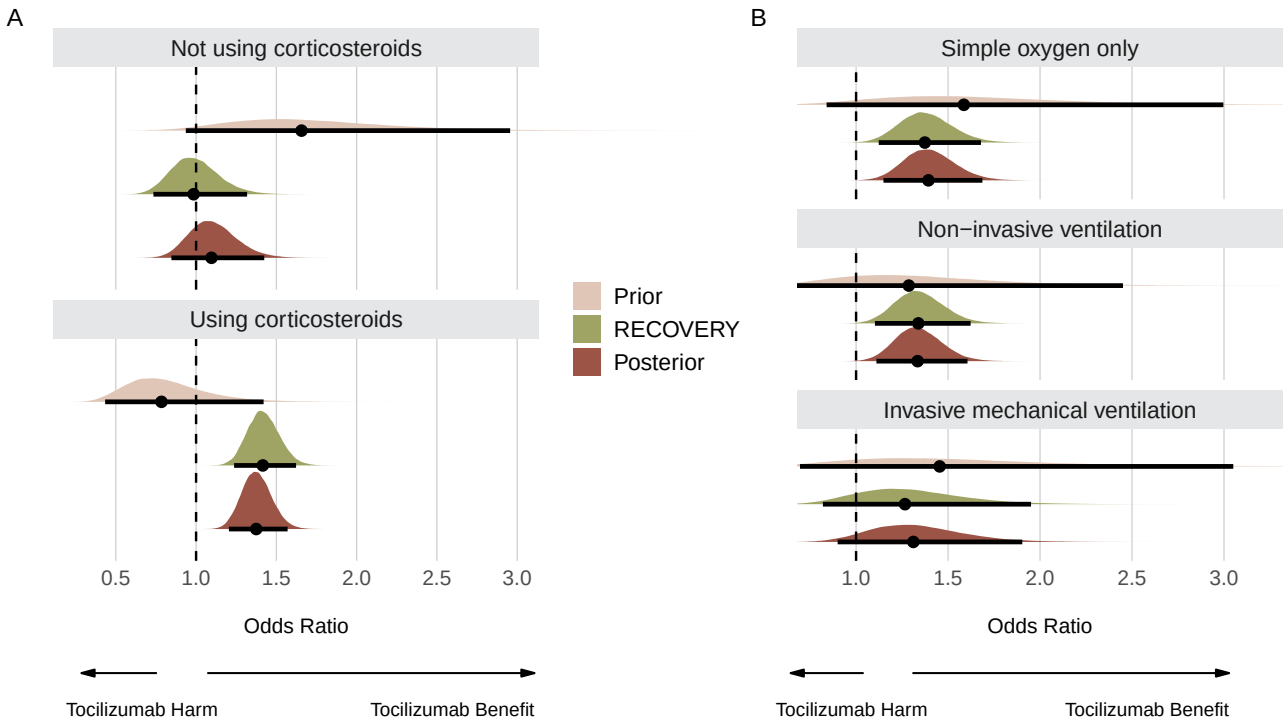
RECOVERY and Priors: Number of events and sample size

Supplementary Table 5

Study	Control			Tocilizumab		
	Events	Total	Risk (%)	Events	Total	Risk (%)
Not using corticosteroids						
RECOVERY	168	367	46	162	357	45
COVACTA	35	65	54	124	188	66
Using corticosteroids						
RECOVERY	873	1721	51	987	1664	59
COVACTA	36	79	46	42	106	40
Simple oxygen only						
RECOVERY	635	933	68	697	935	75
COVACTA	35	44	80	66	78	85
CORIMUNO-19	49	67	73	52	63	83
Non-invasive ventilation						
RECOVERY	362	867	42	401	819	49
COVACTA	19	39	49	56	94	60
Salvarini	58	63	92	54	60	90
Invasive mechanical ventilation						
RECOVERY	47	294	16	52	268	19
COVACTA	13	55	24	35	113	31

Prior, RECOVERY, and Posterior distributions

Supplementary Figure 3



Point estimates depict the median and interval bars depict 95% highest density intervals.

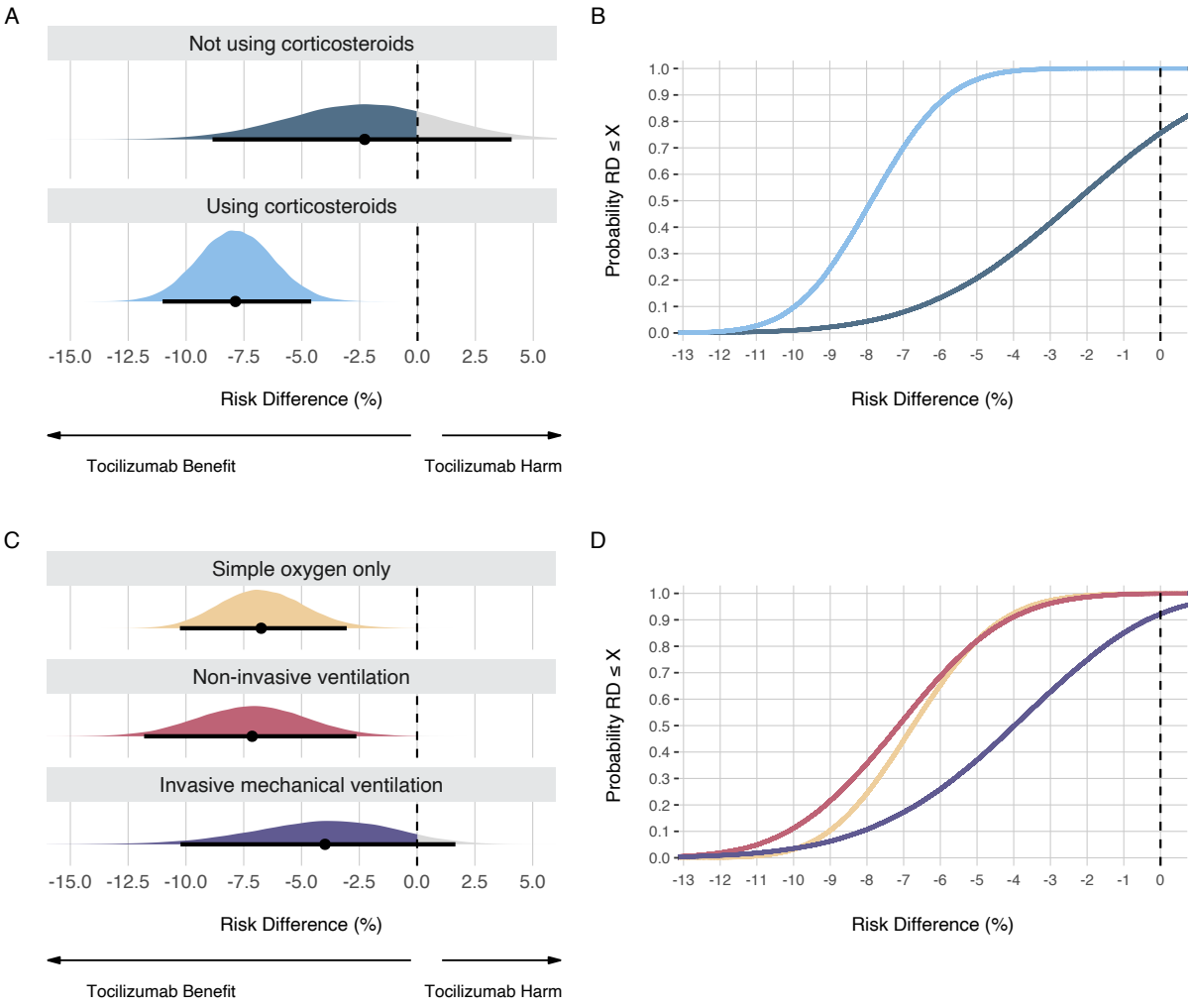
Supplementary Table 6

Distribution	95% Highest Density Interval		
	Median	Lower limit	Upper limit
Not using corticosteroids			
Prior	1.66	0.93	2.94
RECOVERY	0.98	0.73	1.32
Posterior	1.10	0.85	1.43
Using corticosteroids			
Prior	0.78	0.43	1.40
RECOVERY	1.42	1.23	1.62
Posterior	1.37	1.20	1.57
Simple oxygen only			
Prior	1.59	0.85	3.01
RECOVERY	1.37	1.12	1.68
Posterior	1.39	1.15	1.69
Non-invasive ventilation			
Prior	1.29	0.68	2.48
RECOVERY	1.34	1.10	1.62
Posterior	1.33	1.11	1.61
Invasive mechanical ventilation			
Prior	1.45	0.70	3.06
RECOVERY	1.27	0.82	1.96
Posterior	1.31	0.90	1.90

95% highest density intervals of evidence-based prior, RECOVERY, and posterior distributions. This table complements Supplementary Figure 3.

Posterior distribution and probabilities using evidence-based priors

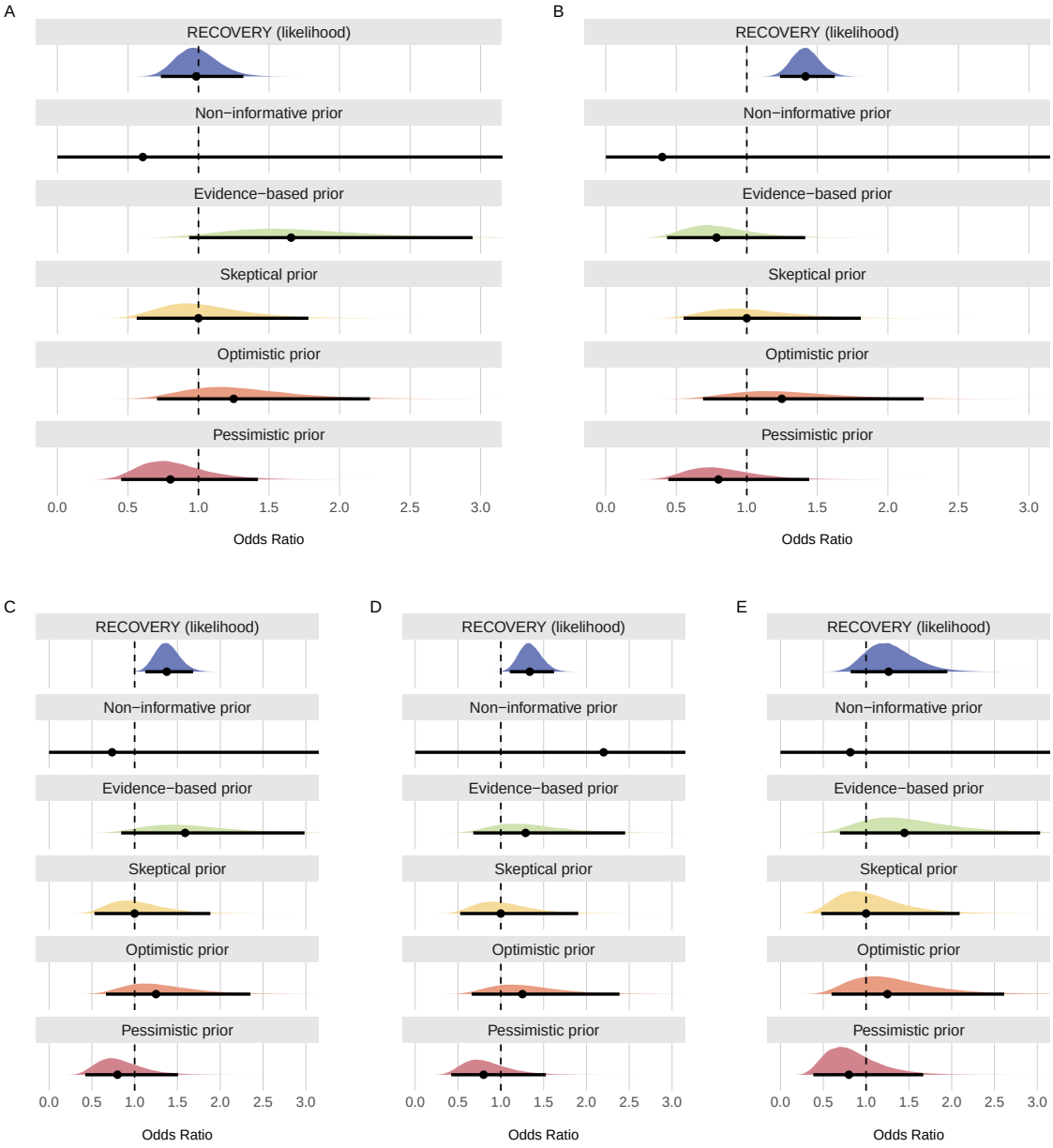
Supplementary Figure 4



Panels A and C: Point estimates depict the median. Interval bars depict the 80 and 95% highest density intervals. Panels B and D: Cumulative posterior distributions correspond to the probabilities that the risk difference (RD) is lower than or equal to the effect size on the X-axis. The colors in Panels B and D match the ones used in Panels A and C.

Sensitivity analyses using different priors

Supplementary Figure 5



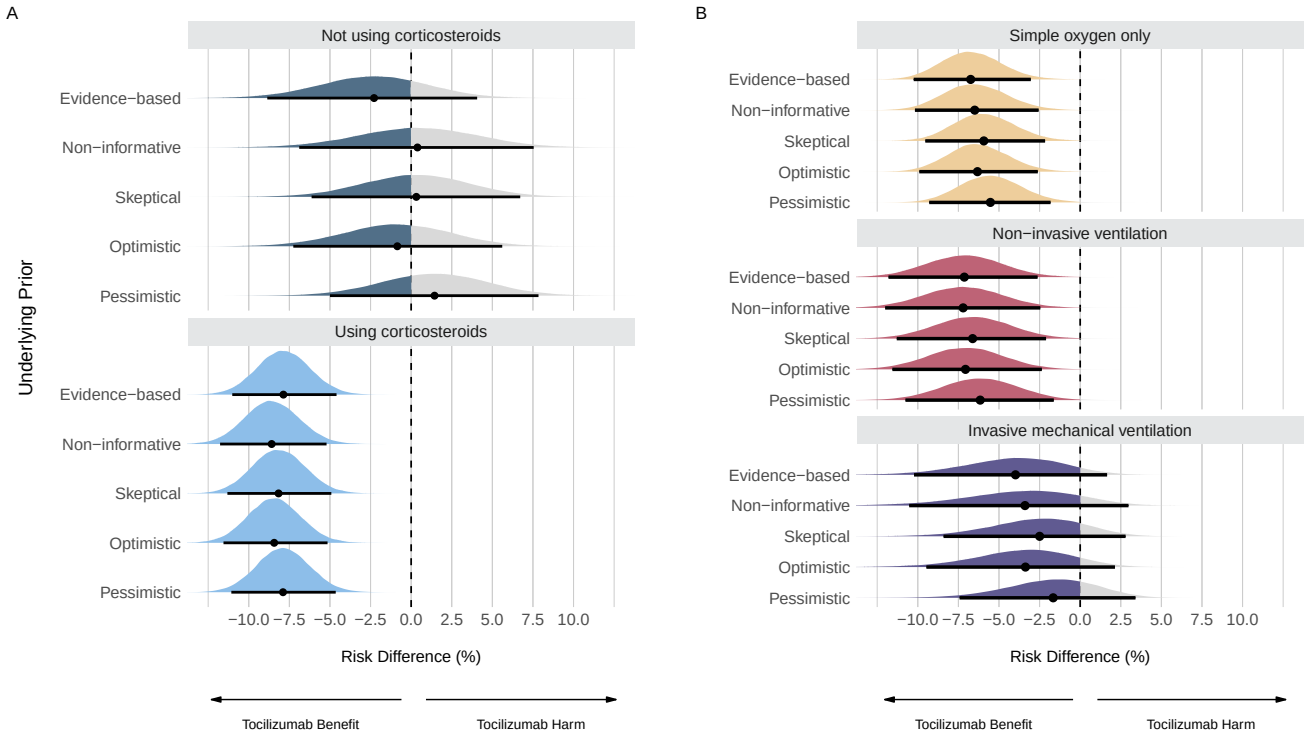
Prior distributions for each subgroup.

Panel A shows results for patients not using corticosteroids; Panel B shows results for patients using corticosteroids.

Panel C shows results for simple oxygen only; Panel D shows results for non-invasive ventilation; Panel E shows results for invasive mechanical ventilation.

Point estimates depict the median and interval bars depict 95th quantile intervals.

Supplementary Figure 6



Posterior distributions from sensitivity analyses using different priors.

Point estimates depict the median. Interval bars depict the 95% highest density intervals.

Supplementary Table 7

Underlying Prior	95% Highest Density Interval		
	Median	Lower limit	Upper limit
Not using corticosteroids			
Evidence-based	-2.3	-8.9	4.1
Non-informative	0.4	-6.9	7.5
Skeptical	0.3	-6.1	6.7
Optimistic	-0.9	-7.3	5.6
Pessimistic	1.4	-5.0	7.8
Using corticosteroids			
Evidence-based	-7.9	-11.0	-4.6
Non-informative	-8.6	-11.8	-5.2
Skeptical	-8.2	-11.3	-4.9
Optimistic	-8.4	-11.6	-5.1
Pessimistic	-7.9	-11.1	-4.6
Simple oxygen only			
Evidence-based	-6.7	-10.3	-3.0
Non-informative	-6.5	-10.2	-2.6
Skeptical	-5.9	-9.5	-2.2
Optimistic	-6.3	-9.9	-2.6
Pessimistic	-5.5	-9.3	-1.8
Non-invasive ventilation			
Evidence-based	-7.1	-11.8	-2.6
Non-informative	-7.2	-12.0	-2.5
Skeptical	-6.6	-11.3	-2.1
Optimistic	-7.1	-11.6	-2.4
Pessimistic	-6.2	-10.8	-1.6
Invasive mechanical ventilation			
Evidence-based	-4.0	-10.2	1.7
Non-informative	-3.4	-10.5	3.0
Skeptical	-2.5	-8.4	2.8
Optimistic	-3.4	-9.5	2.1
Pessimistic	-1.7	-7.4	3.4

Median and 95% highest density intervals of posteriors distributions from sensitivity analyses with different priors. This table complements Supplementary Figure 6.

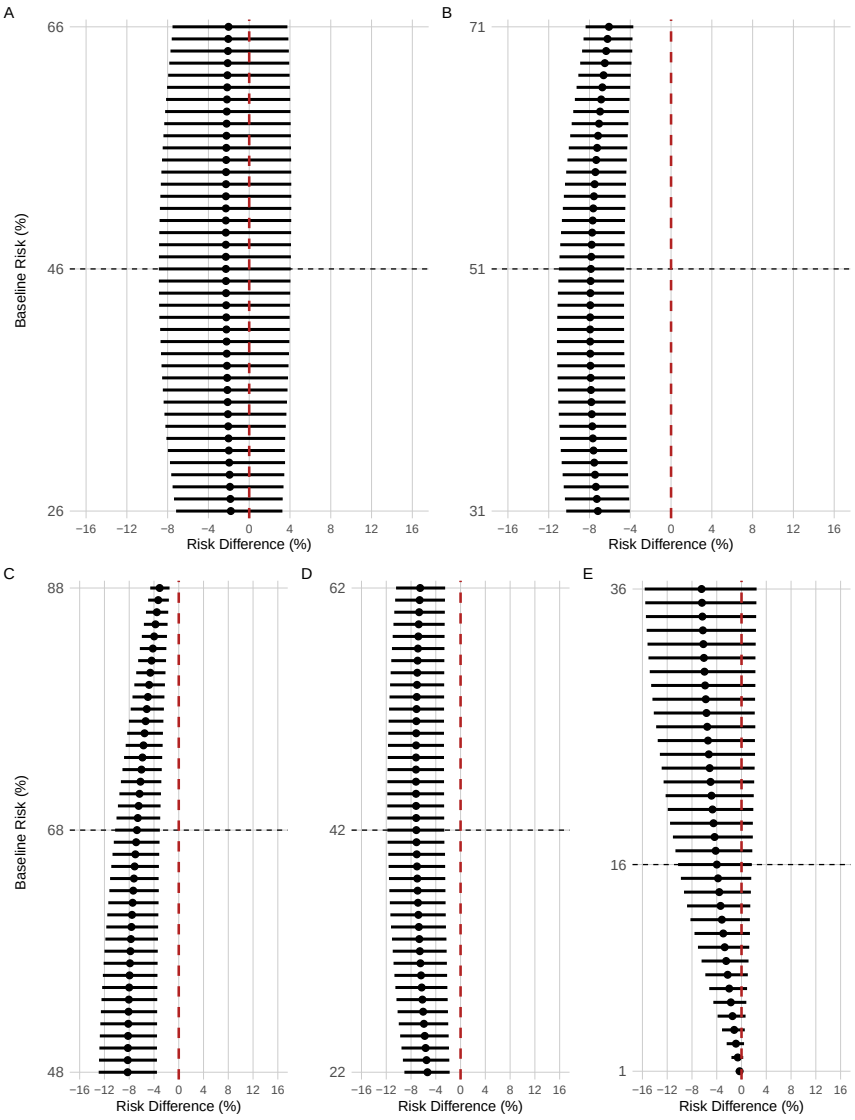
Supplementary Table 8

	Propability of Benefit				Probability of Harm		
Underlying Prior	Pr(< -5%)	Pr(< -2%)	Pr(< -1%)	Pr(< 0%)	Pr(> 1%)	Pr(> 2%)	Pr(> 5%)
Not using corticosteroids							
Evidence-based	20.7	53.4	65.1	75.6	15.9	9.6	1.3
Non-informative	7.5	25.9	35.3	45.7	43.5	33.2	10.4
Skeptical	5.4	24.2	34.4	46.2	41.8	30.4	7.6
Optimistic	10.5	36.3	48.2	60.1	29.0	19.5	3.7
Pessimistic	2.6	14.8	22.9	33.1	55.4	43.2	13.7
Using corticosteroids							
Evidence-based	95.8	100.0	100.0	100.0	0.0	0.0	0.0
Non-informative	98.2	100.0	100.0	100.0	0.0	0.0	0.0
Skeptical	97.2	100.0	100.0	100.0	0.0	0.0	0.0
Optimistic	98.1	100.0	100.0	100.0	0.0	0.0	0.0
Pessimistic	96.0	100.0	100.0	100.0	0.0	0.0	0.0
Simple oxygen only							
Evidence-based	82.3	99.2	99.8	100.0	0.0	0.0	0.0
Non-informative	77.1	98.5	99.6	99.9	0.0	0.0	0.0
Skeptical	68.7	97.7	99.3	99.8	0.0	0.0	0.0
Optimistic	75.7	98.6	99.6	99.9	0.0	0.0	0.0
Pessimistic	60.9	96.2	98.8	99.7	0.1	0.0	0.0
Non-invasive ventilation							
Evidence-based	82.0	98.6	99.6	99.9	0.0	0.0	0.0
Non-informative	81.7	98.4	99.5	99.8	0.0	0.0	0.0
Skeptical	75.5	97.6	99.2	99.8	0.1	0.0	0.0
Optimistic	81.1	98.5	99.6	99.9	0.0	0.0	0.0
Pessimistic	68.9	96.3	98.7	99.6	0.1	0.0	0.0
Invasive mechanical ventilation							
Evidence-based	37.0	74.8	85.0	92.2	3.5	1.2	0.0
Non-informative	32.7	66.1	76.5	85.3	8.0	3.8	0.1
Skeptical	20.4	56.8	70.3	82.0	9.4	4.1	0.1
Optimistic	29.7	68.3	79.8	88.7	5.4	2.0	0.0
Pessimistic	13.1	45.2	59.5	73.2	15.5	7.5	0.2

Posterior probabilities from sensitivity analyses using different priors. This table complements Supplementary Figure 6.

Sensitivity analyses using different baseline risks: Use of corticosteroids

Supplementary Figure 7

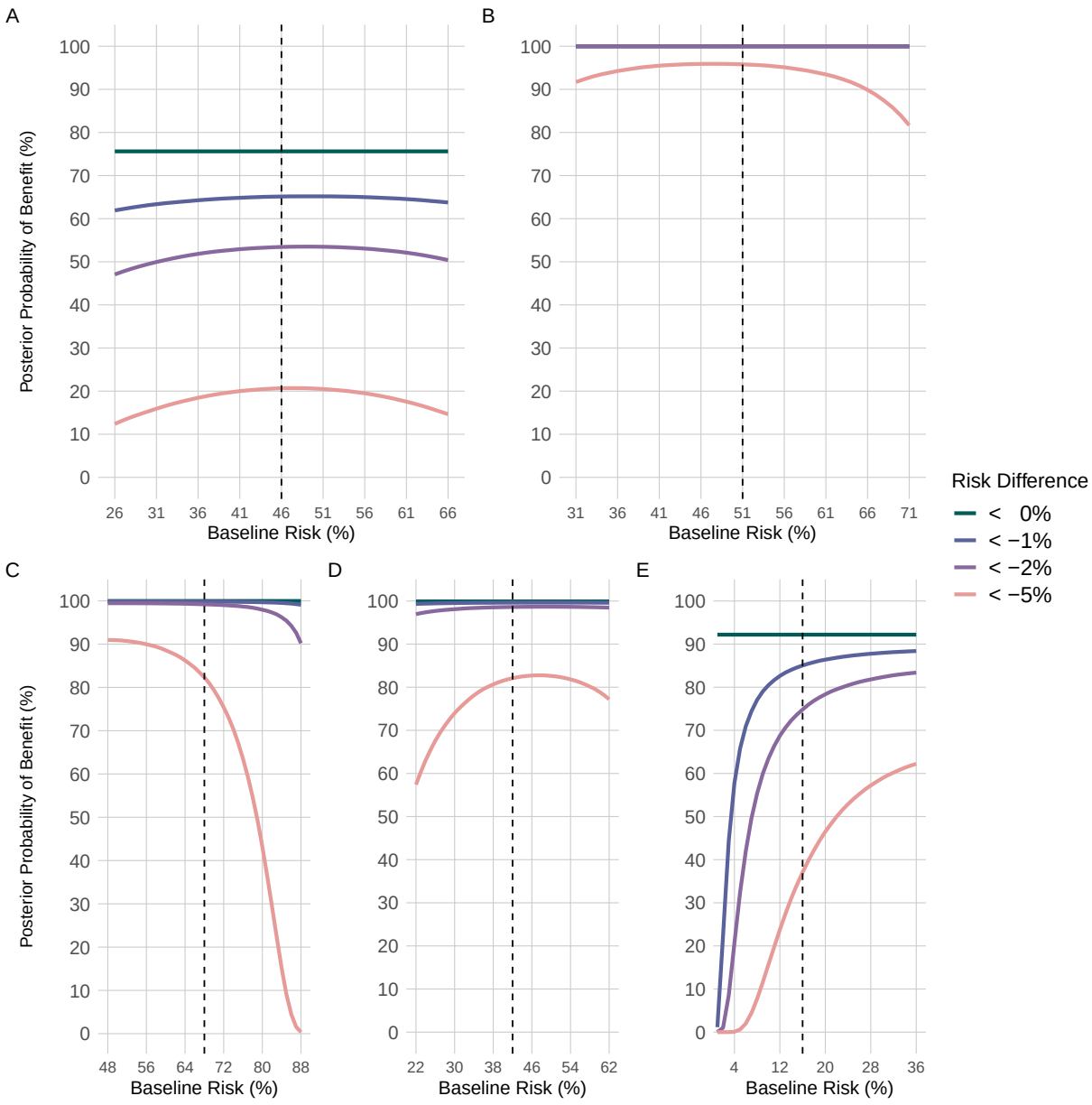


Posterior distributions from sensitivity analyses using multiple different baseline risks.

Each line represents posterior distribution for the corresponding baseline risk. Horizontal black dashed lines represent the respective baseline risk underlying other analyses (Supplementary Figure 4), i.e., risk in the control group in the RECOVERY trial for each subgroup (Supplementary Table 5). Vertical red dashed line represent 0% risk difference. Point estimates depict the median and interval bars depict 95% highest density intervals.

Panel A shows results for patients not using corticosteroids; Panel B shows results for patients using corticosteroids. Panel C shows results for simple oxygen only; Panel D shows results for non-invasive ventilation; Panel E shows results for invasive mechanical ventilation.

Supplementary Figure 8



Posterior probabilities from sensitivity analyses using multiple different baseline risks.

Each line represents the posterior probability of benefit for a specific cutoff, such as risk difference lower to 0%, 1%, 2% and 5%. Vertical black dashed lines represent the respective baseline risk underlying other analyses (Supplementary Figure 4), i.e., risk in the control group in the RECOVERY trial for each subgroup (Supplementary Table 5).

Panel A shows results for patients not using corticosteroids; Panel B shows results for patients using corticosteroids. Panel C shows results for simple oxygen only; Panel D shows results for non-invasive ventilation; Panel E shows results for invasive mechanical ventilation.