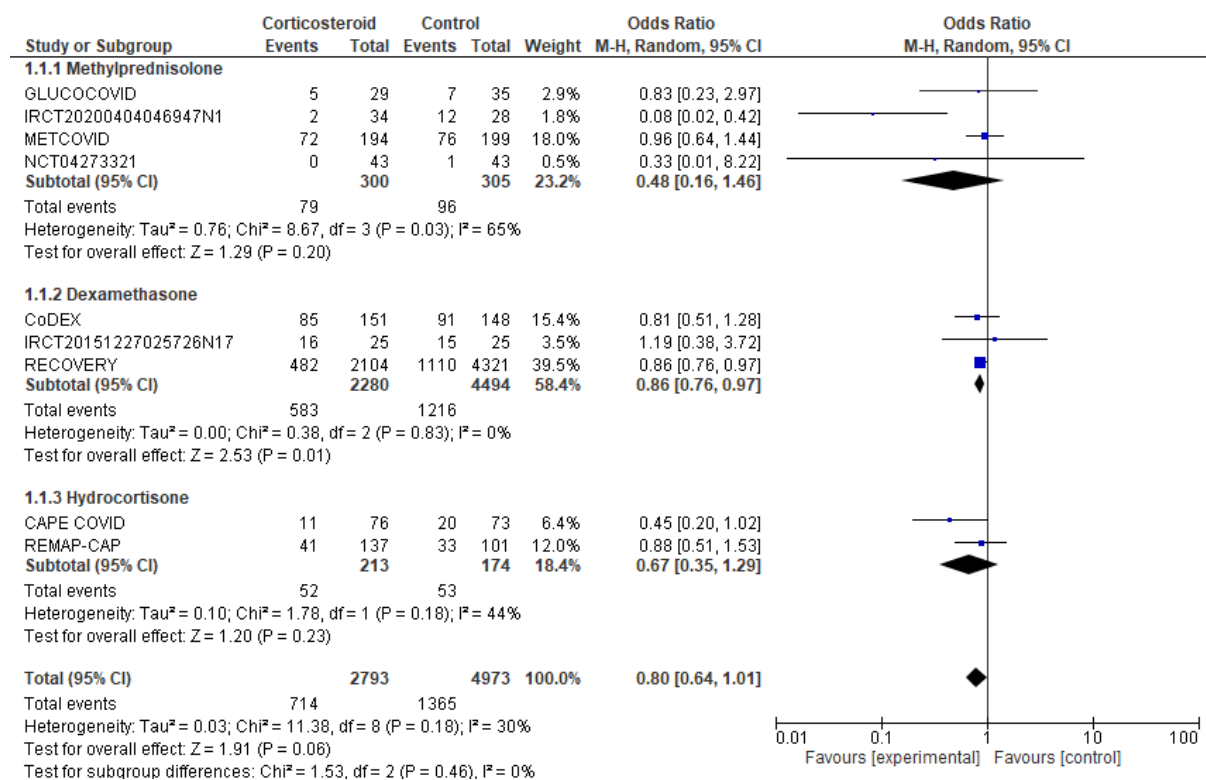


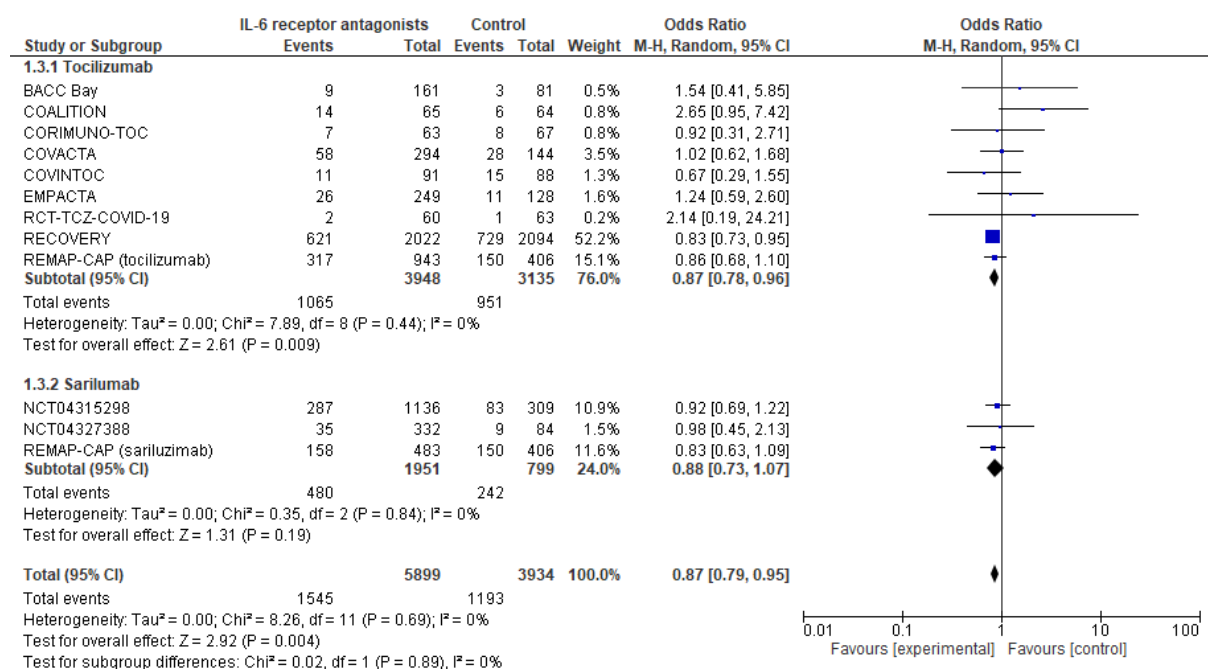
**SUPPLEMENTARY INFORMATION**

**Figure S1. Flowcharts detailing the systematic searches for each therapy of interest.**



**Figure S2. Forest plots showing the sub-analysis of corticosteroids grouped by class and their effects on mortality of hospitalised adult patients with COVID-19.**

Study name has been used unless no name was available in which case the trial registration identifier has been used. The weight represents the percentage contribution of each study to the summary effect estimate.



**Figure S3. Forest plots showing the sub-analysis of IL-6 receptor antagonists grouped by class and their effects on mortality of hospitalised adult patients with COVID-19.**

Study name has been used unless no name was available in which case the trial registration identifier has been used. The weight represents the percentage contribution of each study to the summary effect estimate.

## Table S1.

**Question:** Corticosteroids compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

**Setting:**

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| Certainty assessment |                   |              |                          |              |                      |                      | № of patients    |  | Effect                        |   | Certainty            | Importance |
|----------------------|-------------------|--------------|--------------------------|--------------|----------------------|----------------------|------------------|--|-------------------------------|---|----------------------|------------|
| № of studies         | Study design      | Risk of bias | Inconsistency            | Indirectness | Imprecision          | Other considerations | Corticosteroids  | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI)             | Absolute (95% CI)                                   |                      |            |
| <b>Mortality</b>     |                   |              |                          |              |                      |                      |                  |  |                               |   |                      |            |
| 9                    | randomised trials | not serious  | not serious <sup>a</sup> | not serious  | serious <sup>b</sup> | none                 | 714/2793 (25.6%) | 1365/4973 (27.4%)  | <b>OR 0.80</b> (0.64 to 1.01) | <b>42 fewer per 1,000</b> (from 80 fewer to 2 more) | ⊕⊕⊕<br>○<br>MODERATE | CRITICAL   |

CI: Confidence interval; OR: Odds ratio

## Explanations

a. one study (Jamaati) shows discordance with the other eight studies by favouring control but we have not downgraded based on this small study consisting of 50 specific participants while the other eight studies have combined 7716 participants and the confidence intervals are broadly consistent with the other trials.

b. CI's show both beneficial and detrimental effects

## Table S2.

**Author(s):**

**Question:** IL-6 receptor antagonists compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

**Setting:**

### Bibliography:

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| Certainty assessment |              |              |               |              |             |                      | Nº of patients            |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|---------------------------|--|-------------------|-------------------|-----------|------------|
| Nº of studies        | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | IL-6 receptor antagonists | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|    |                   |                      |             |             |             |      |                   |                   |                        |   |               |          |
|----|-------------------|----------------------|-------------|-------------|-------------|------|-------------------|-------------------|------------------------|---|---------------|----------|
| 11 | randomised trials | serious <sup>a</sup> | not serious | not serious | not serious | none | 1545/5899 (26.2%) | 1043/3528 (29.6%) | OR 0.87 (0.79 to 0.96) | 28 fewer per 1,000 (from 47 fewer to 8 fewer) | ⊕⊕⊕○ MODERATE | CRITICAL |
|----|-------------------|----------------------|-------------|-------------|-------------|------|-------------------|-------------------|------------------------|---|---------------|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. Inclusion of data from preprints

## Table S3.

**Author(s):**

**Question:** Hydroxychloroquine compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

**Setting:**

**Bibliography:**

- Abd-El salam, S., Esmail, E. S., Khalaf, M., Abdo, E. F., Medhat, M. A., El Ghafar, M. S. A., ... Alborae, M. (2020). "Hydroxychloroquine in the treatment of COVID-19: A multicenter randomised controlled study." American Journal of Tropical Medicine and Hygiene, 103(4), 1635–1639. <https://doi.org/10.4269/ajtmh.20-0873>
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
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| Certainty assessment |              |              |               |              |             |                      | № of patients      |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|--------------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Hydroxychloroquine | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|    |                   |             |             |             |                      |      |                  |                  |                        |   |   |          |
|----|-------------------|-------------|-------------|-------------|----------------------|------|------------------|------------------|------------------------|---|---|----------|
| 13 | randomised trials | not serious | not serious | not serious | serious <sup>a</sup> | none | 628/3589 (17.5%) | 984/5132 (19.2%) | OR 1.09 (0.97 to 1.22) | 14 more per 1,000 (from 5 fewer to 33 more) |  MODERATE | CRITICAL |
|----|-------------------|-------------|-------------|-------------|----------------------|------|------------------|------------------|------------------------|---|---|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. CI's show both beneficial and detrimental effects

### Table S4.

**Author(s):**

**Question:** Azithromycin compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

**Setting:**

**Bibliography:**

- Abaleke, E., Abbas, M., Abbasi, S., Abbott, A., Abdelaziz, A., Abdelbadie, S., ... Zuriaga-Alvaro, A. (2021). "Azithromycin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial." The Lancet, 397(10274), 605–612. [https://doi.org/10.1016/S0140-6736\(21\)00149-5](https://doi.org/10.1016/S0140-6736(21)00149-5)
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| Certainty assessment | № of patients | Effect | Certainty | Importance |
|----------------------|---------------|--------|-----------|------------|
|----------------------|---------------|--------|-----------|------------|

| № of studies | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Azithromycin | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |  |
|--------------|--------------|--------------|---------------|--------------|-------------|----------------------|--------------|--|-------------------|-------------------|--|
|--------------|--------------|--------------|---------------|--------------|-------------|----------------------|--------------|--|-------------------|-------------------|--|

**Mortality**

|   |                   |             |             |             |                      |      |                  |                   |                        |  |                      |          |
|---|-------------------|-------------|-------------|-------------|----------------------|------|------------------|-------------------|------------------------|--|----------------------|----------|
| 5 | randomised trials | not serious | not serious | not serious | serious <sup>a</sup> | none | 657/3169 (20.7%) | 1250/5898 (21.2%) | OR 0.97 (0.87 to 1.08) | 5 fewer per 1,000 (from 22 fewer to 13 more) | ⊕⊕⊕<br>○<br>MODERATE | CRITICAL |
|---|-------------------|-------------|-------------|-------------|----------------------|------|------------------|-------------------|------------------------|--|----------------------|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. CI's show both beneficial and detrimental effects

### Table S5.

Author(s):

Question: Hydroxychloroquine and Azithromycin compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

Setting:

Bibliography:

1. Cavalcanti, A. B., Zampieri, F. G., Rosa, R. G., Azevedo, L. C. P., Veiga, V. C., Avezum, A., ... Berwanger, O. (2020). "Hydroxychloroquine with or without Azithromycin in Mild-to-Moderate Covid-19." *New England Journal of Medicine*, 383(21), 2041–2052. <https://doi.org/10.1056/nejmoa2019014>
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| Certainty assessment |              |              |               |              |             |                      | № of patients                       |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|-------------------------------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Hydroxychloroquine and Azithromycin | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|   |                   |                      |             |             |                      |      |              |              |                        |  |                  |          |
|---|-------------------|----------------------|-------------|-------------|----------------------|------|--------------|--------------|------------------------|--|------------------|----------|
| 2 | randomised trials | serious <sup>a</sup> | not serious | not serious | serious <sup>b</sup> | none | 6/233 (2.6%) | 8/229 (3.5%) | OR 0.73 (0.25 to 2.15) | 9 fewer per 1,000 (from 26 fewer to 37 more) | ⊕⊕○○<br>○<br>LOW | CRITICAL |
|---|-------------------|----------------------|-------------|-------------|----------------------|------|--------------|--------------|------------------------|--|------------------|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. One trial was terminated following review by a data safety monitoring board

b. CI's show both beneficial and detrimental effects

### Table S6.

Author(s):

Question: Lopinavir-ritonavir compared to Standard care (defined as control, placebo or normal background therapy for COVID-19)

Setting:

**Bibliography:**

- Ader, F., Peiffer-Smadja, N., Poissy, J., Bouscambert-Duchamp, M., Belhadi, D., Diallo, A., ... Mentre, F. (2021). "An open-label randomised controlled trial of the effect of lopinavir/ritonavir, lopinavir/ritonavir plus IFN-β-1a and hydroxychloroquine in hospitalised patients with COVID-19." *Clinical Microbiology and Infection*. <https://doi.org/10.1016/j.cmi.2021.05.020>
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| Certainty assessment |              |              |               |              |             |                      | № of patients       |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|---------------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | lopinavir-ritonavir | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|   |                   |             |             |             |             |      |                  |                  |                        |   |           |          |
|---|-------------------|-------------|-------------|-------------|-------------|------|------------------|------------------|------------------------|---|-----------|----------|
| 4 | randomised trials | not serious | not serious | not serious | not serious | none | 555/3259 (17.0%) | 950/5044 (18.8%) | OR 1.02 (0.91 to 1.15) | 3 more per 1,000 (from 14 fewer to 22 more) | ⊕⊕⊕⊕ HIGH | CRITICAL |
|---|-------------------|-------------|-------------|-------------|-------------|------|------------------|------------------|------------------------|---|-----------|----------|

CI: Confidence interval, OR: Odds ratio

**Table S7.**

Author(s):

Question: Remdesivir compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19

Setting:

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| Certainty assessment |              |              |               |              |             |                      | № of patients |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|---------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Remdesivir    | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |



| Certainty assessment |              |              |               |              |             |                      | № of patients |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|---------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Remdesivir    | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|   |                   |             |             |             |                      |      |                  |                  |                                  |   |  |          |
|---|-------------------|-------------|-------------|-------------|----------------------|------|------------------|------------------|----------------------------------|---|--|----------|
| 5 | randomised trials | not serious | not serious | not serious | serious <sup>a</sup> | none | 392/3860 (10.2%) | 397/3543 (11.2%) | <b>OR 0.93</b><br>(0.80 to 1.08) | <b>7 fewer per 1,000</b><br>(from 20 fewer to 8 more) |  MODERATE | CRITICAL |
|---|-------------------|-------------|-------------|-------------|----------------------|------|------------------|------------------|----------------------------------|---|--|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. CI's show both beneficial and detrimental effects

### Table S8.

Author(s):

Question: Colchicine compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19


Setting:

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| Certainty assessment |              |              |               |              |             |                      | № of patients |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|---------------|--|-------------------|-------------------|-----------|------------|
| № of studies         | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Colchicine    | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

**Mortality**

|   |                   |                      |             |             |                      |      |                   |                   |                                  |   |   |          |
|---|-------------------|----------------------|-------------|-------------|----------------------|------|-------------------|-------------------|----------------------------------|---|---|----------|
| 3 | randomised trials | serious <sup>a</sup> | not serious | not serious | serious <sup>b</sup> | none | 1174/5701 (20.6%) | 1196/5816 (20.6%) | <b>OR 0.64</b><br>(0.22 to 1.89) | <b>64 fewer per 1,000</b><br>(from 152 fewer to 123 more) |  LOW | CRITICAL |
|---|-------------------|----------------------|-------------|-------------|----------------------|------|-------------------|-------------------|----------------------------------|---|---|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. Includes data from one preprint (Horby)

b. CI's show both beneficial and detrimental effects

## Table S9

Author(s):

Question: Interferon beta compared to Standard care (defined as control, placebo or normal background therapy) for COVID-19


Setting:

Bibliography:

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| Certainty assessment |              |              |               |              |             |                      | No of patients  |  | Effect            |                   | Certainty | Importance |
|----------------------|--------------|--------------|---------------|--------------|-------------|----------------------|-----------------|--|-------------------|-------------------|-----------|------------|
| No of studies        | Study design | Risk of bias | Inconsistency | Indirectness | Imprecision | Other considerations | Interferon beta | Standard care (defined as control, placebo or normal background therapy) | Relative (95% CI) | Absolute (95% CI) |           |            |

### Mortality

|   |                   |                          |                      |             |                      |      |                  |                  |                        |   |   |          |
|---|-------------------|--------------------------|----------------------|-------------|----------------------|------|------------------|------------------|------------------------|---|---|----------|
| 4 | randomised trials | not serious <sup>a</sup> | serious <sup>b</sup> | not serious | serious <sup>c</sup> | none | 263/2165 (12.1%) | 248/2142 (11.6%) | OR 0.52 (0.22 to 1.26) | 52 fewer per 1,000 (from 88 fewer to 26 more) |  LOW | CRITICAL |
|---|-------------------|--------------------------|----------------------|-------------|----------------------|------|------------------|------------------|------------------------|---|---|----------|

CI: Confidence interval; OR: Odds ratio

## Explanations

a. 3 out of 4 included studies had high risk of bias; however, we did not downgrade for RoB in the body of evidence, as the 4th included study has low risk of bias and it is including 4100 patients compared to 207 patients of all the other studies taken together.

b. Heterogeneity between studies

c. CI's show both beneficial and detrimental effects