

Mortality in influenza virus and SARS-CoV-2 co-infected patients treated with and without corticosteroids: an observational study

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Background: Co-infection with SARS-CoV-2 and influenza viruses have been reported since the start of the pandemic, and lead to worse outcomes¹. While corticosteroids reduce mortality in people with COVID-19 who receive supplemental oxygen², the effect of corticosteroids in severe influenza virus infection is uncertain³.

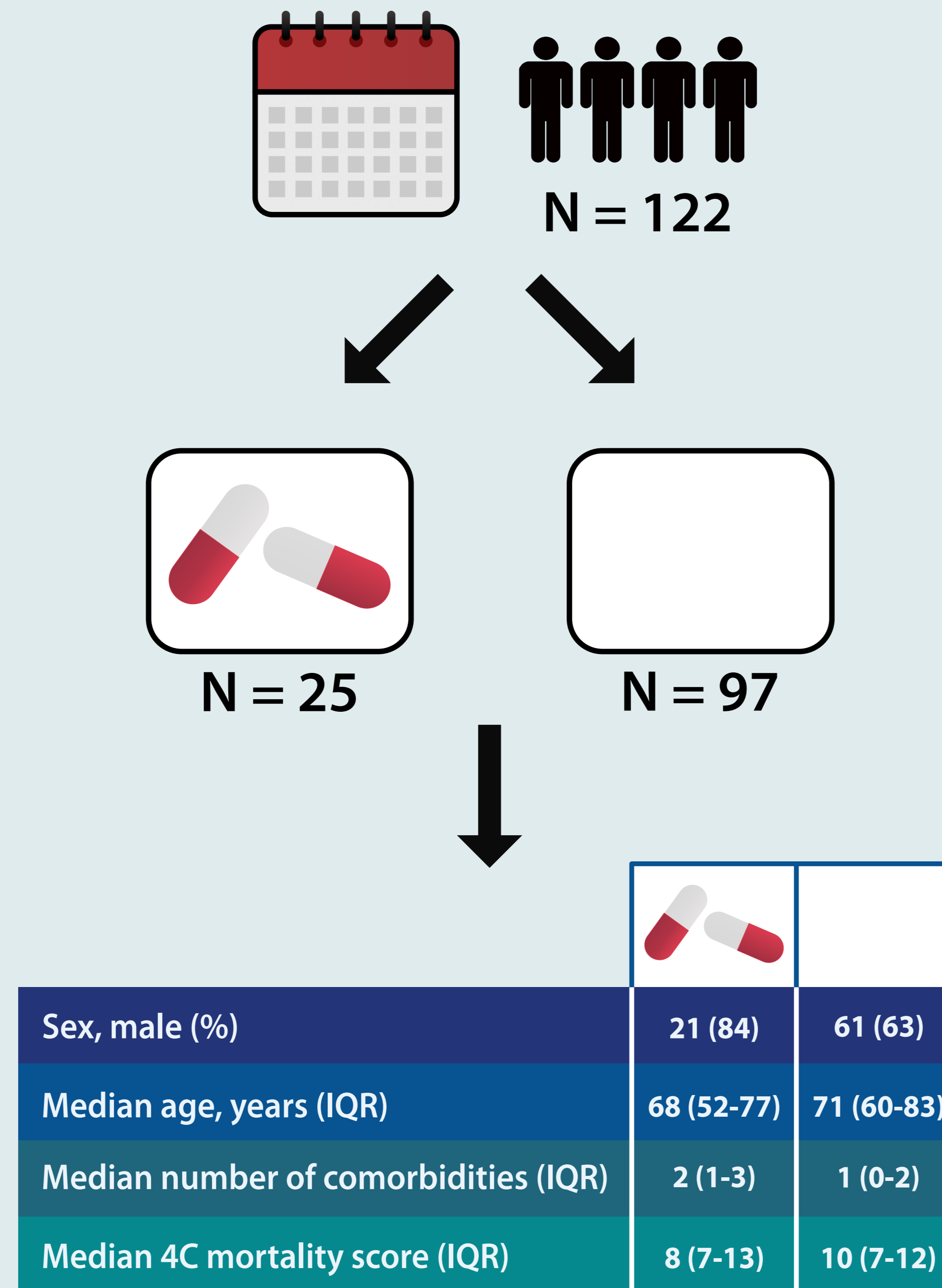
The RECOVERY trial² demonstrated the effectiveness of dexamethasone in COVID-19 patients who needed supplemental oxygen. After its publication, corticosteroids became standard of care, therefore we split our study groups into pre- and post-RECOVERY trial.

Limitations: No dates on start of corticosteroid treatment, ICU admission or initiation of IMV were available, making it impossible to draw conclusions on the causality of treatment with corticosteroids and the need for IMV or ICU admission.

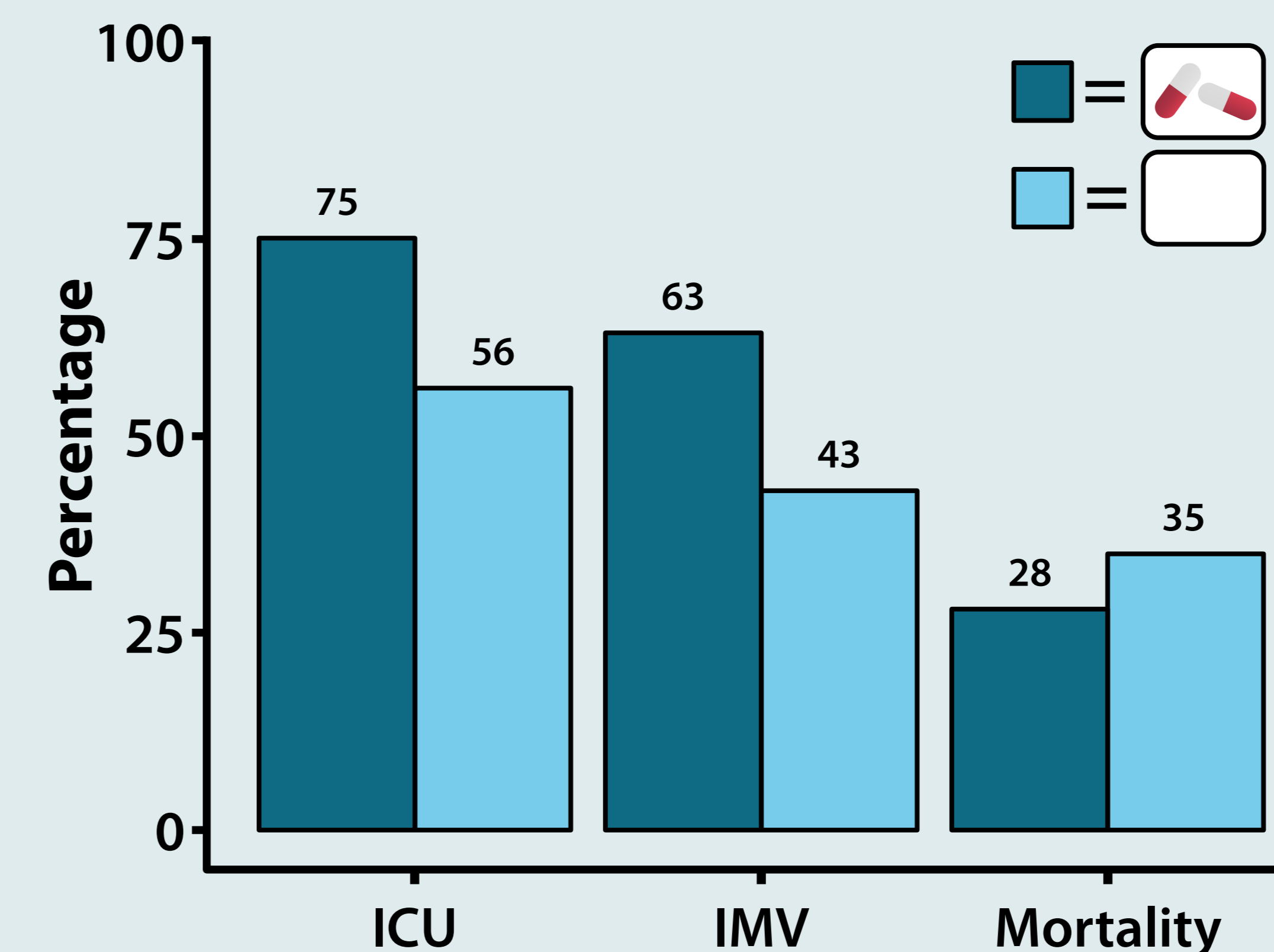
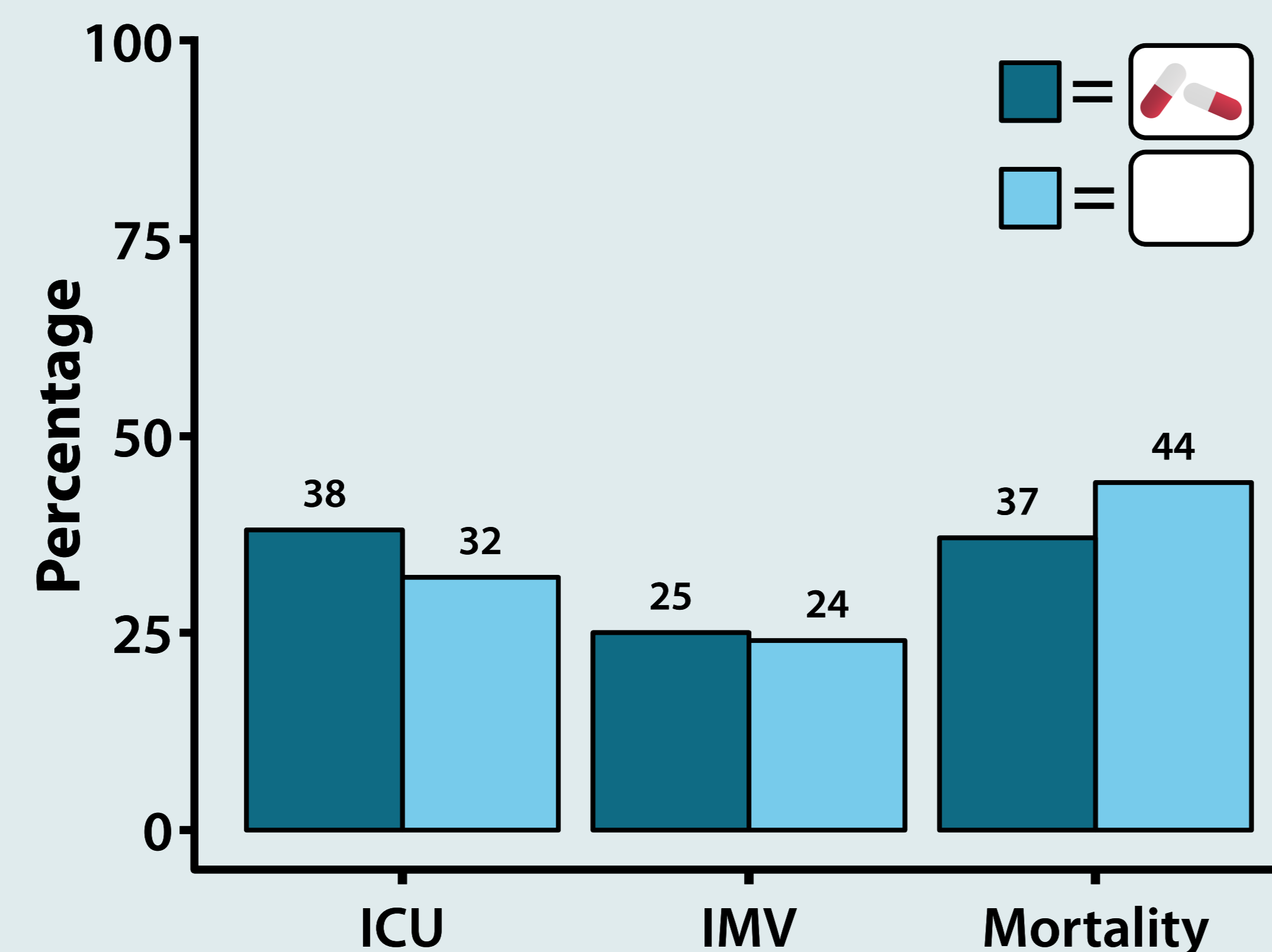
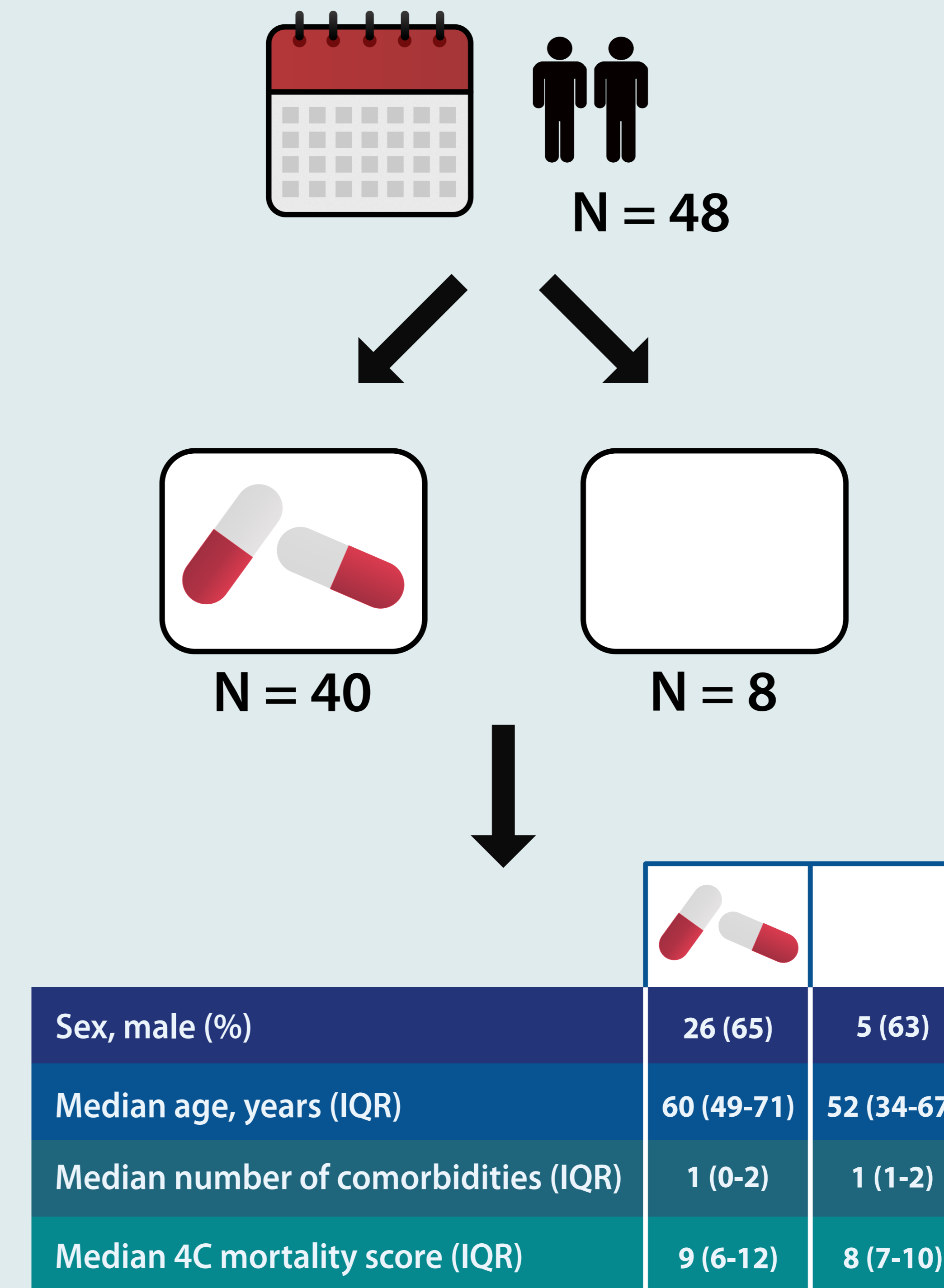
References

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PRE-RECOVERY TRIAL



POST-RECOVERY TRIAL



Adults co-infected with both RT-PCR confirmed SARS-CoV-2 and influenza virus infection who received supplemental oxygen while hospitalised were included in this observational study. All patients were part of the ISARIC4C / WHO CCP-UK⁴ and were hospitalised between 06.02.2020 and 8.12.2021.

Drug prescription data were reviewed to identify patients who received systemic corticosteroids.

Patient characteristics. 20% of patients were treated with corticosteroids in the pre-RECOVERY period, while in the post-RECOVERY period the percentage treated rose to 83%.

Comparison between patients who were admitted to ICU, receive invasive mechanical ventilation (IMV) or die in hospital. A priori power analysis suggested that the sample size is too small to detect significance.