

# P260- MP3 pulses COVID 19 trial: effect of intravenous pulses of methylprednisolone 250 mg versus dexamethasone 6 mg in hospitalised adults with severe COVID-19 pneumonia

## Background

- Efficacy and safety of high doses glucocorticoids for the treatment of COVID-19 has shown mixed outcomes.
- We try to evaluate the effectiveness of methylprednisolone bolus vs. dexamethasone 6 mg in patients with severe COVID-19.

## Material and Methods

- Randomized, open-label, controlled trial
- February - August 2021
- Trial suspended after first interim analysis → investigators considered continuing the trial would be futile
- Randomisation 1:1 ratio
  - dexamethasone 6 once daily for up to 10 days
  - methylprednisolone 250 mg once

Multicentre trial  
4 hospitals  
in **Spain**



## Results

n: 128 (125 patients analyzed)

66 %

Age: 60y ±17

## Comparison

All patients in **group 5 WHO** clinical progression scale (*hospitalized, with oxygen or nasal mask*) at **randomization**.

128 randomly assigned

125 included into analysis

90 days of **follow-up**

63 allocated to **methylprednisolone** 250 mg

(equivalent to approximately 1250 mg of hydrocortisone)

62 allocated to **dexamethasone** 6 mg

(equivalent to approximately 160 mg of hydrocortisone)

## Efficacy

Absolute risk difference (95% CI)

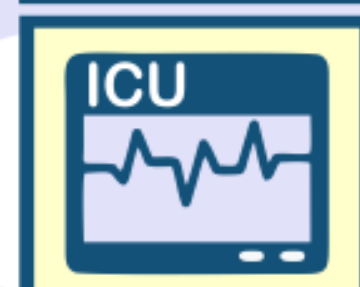


Mortality at 28 days (modified intention-to-treat: mITT)

5 %

0.1% (-8.8 to 9.1)

5 %



Admission to intensive care unit (ICU) at 28 days (mITT)

16 %

1.4% (-14.2 to 11.5)

15 %



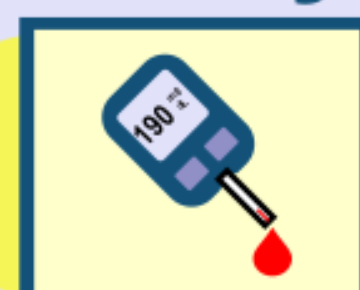
Intubation at 28 days (mITT)

13 %

1.0% (-13.0 to 11.1)

12 %

## Safety

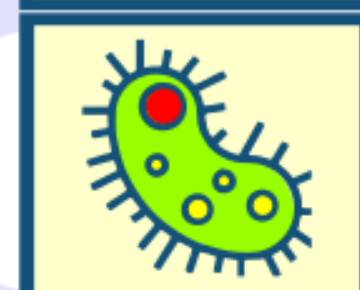


Hyperglycaemia at 28 days (mITT)

27 %

18.9% (5.6 to 31.8)

8 %



Secondary infections at 28 days (mITT)

11%

-1.8% (-10.1 to 13.7)

13 %

## Conclusions

Among severe but not critical patients with COVID-19, 250 mg/d for 3 days of methylprednisolone compared with 6 mg/d for 10 days of dexamethasone did not result in a decrease in mortality or intubation.