BARICITINIB AGAINST SEVERE COVID-19: EFFECTIVENESS AND SAFETY IN HOSPITAL CARE

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Material and methods

- Observational
- Tertiary hospital
- Severe COVID19
- Retrospective
- Multidisciplinary
- Single-center

Inclusion criteria

- Adult patients
- Baricitinib 2-4 mg /24h, 3-4 days
- Other COVID-19 treatments were allowed

Variables collected

- Age
- Sex
- Drugs during admission
- Analytical parameters
- Admission period
- Time to recovery
- Adverse events
- Overall survival

Clinical improvement → Difference in values on a 1-8 scale of clinical status during admission (from 1=hospital discharge without limitation of activities to 8=death) between day +1 of starting baricitinib and day +14.

Data → Hospital electronic prescription program, Electronic medical record

Statistical analysis → SPSS® v.25 expressing the variables as frequencies, medians with interquartile ranges (IQR) and the Wilcoxon test for p values.

Results

49 patients were administered baricitinib

n = 6 were excluded → 4 baricit. only 1 day
→ 2 baricit. only 2 days

43 patients were finally included in the study

Drugs during admission — n% (%).
- Azithromycin 42 (98%)
- Ceftriaxone 36 (84%)
- Other antibiotic agent 19 (44%)
- Chloroquine or hydroxychloroquine 42 (98%)
- Corticosteroids 36 (84%)
- Tocilizumab 8 (19%)
- Convalescent plasma 2 (5%)
- Colchicine 1 (2%)

42 (98%) patients recovered
- None with severe COVID-19

- No adverse event was found

Outcomes Overall and According to Score on the Ordinal Scale

N = 43

Clinical improvement**
- p<0.01*

Overall survival at day 14
- 23 (53)
- 12 (28)
- 8 (19)

Time to recovery in days**
- 20 (14-31)
- 18 (13-34)
- 23 (15-29)

8-category ordinal scale at day 14
- 23 (53)
- 12 (28)
- 8 (19)

- 1 points
- 2 points
- 3 points
- 4 points
- 5 points
- 6 points
- 7, 8 points

Data are median (interquartile range, IQR), n (%), or n/N (%).
- Eight-category ordinal scale are:
  1. not hospitalized, no limitations of activities
  2. not hospitalized, limitation of activities, home oxygen requirement, or both
  3. hospitalized, just for infection-control reasons
  4. hospitalized, not requiring supplemental oxygen but requiring ongoing medical care
  5. hospitalized, requiring any supplemental oxygen
  6. hospitalized, requiring non-invasive ventilation or use of high-flow oxygen devices
  7. hospitalized, receiving invasive mechanical ventilation or extracorporeal membrane oxygenation (ECMO), 8, death.

Time to recovery → n days to reach categories 1 or 2 on the eight-category scale

Conclusion and Relevance

Patients treated with baricitinib for COVID-19 in our study presented statistically significant clinical and analytical improvement without relevant adverse events. The results of ongoing clinical trials will show more light on its efficacy and safety in treating COVID-19.