

EXPERIENCE IN THE USE OF TOCILIZUMAB IN PATIENTS WITH COVID-19.

HAS IT REALLY BEEN EFFECTIVE?

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Background and importance

Tocilizumab is being used to treat severe SARS-COV-2 Coronavirus pneumonia.

Aim and objectives

To analyze the efficacy of tocilizumab in patients with severe SARS-COV-2 Coronavirus pneumonia during the inflammatory phase of the disease.

Material and methods

Observational and retrospective study which included 75 patients with severe SARS-COV-2 Coronavirus pneumonia treated with tocilizumab, conducted between March-16th and April-22th of 2020.

1. Patient inclusion. Criteria for severe pneumonia:

- Failure of at least 1 organ.
- Oxygen saturation with ambient air <90%.
- Respiratory rate ≥ 30 breaths per minute.

2. Prognostic evaluation at admission → CURB-65 score.

3. Medical history review

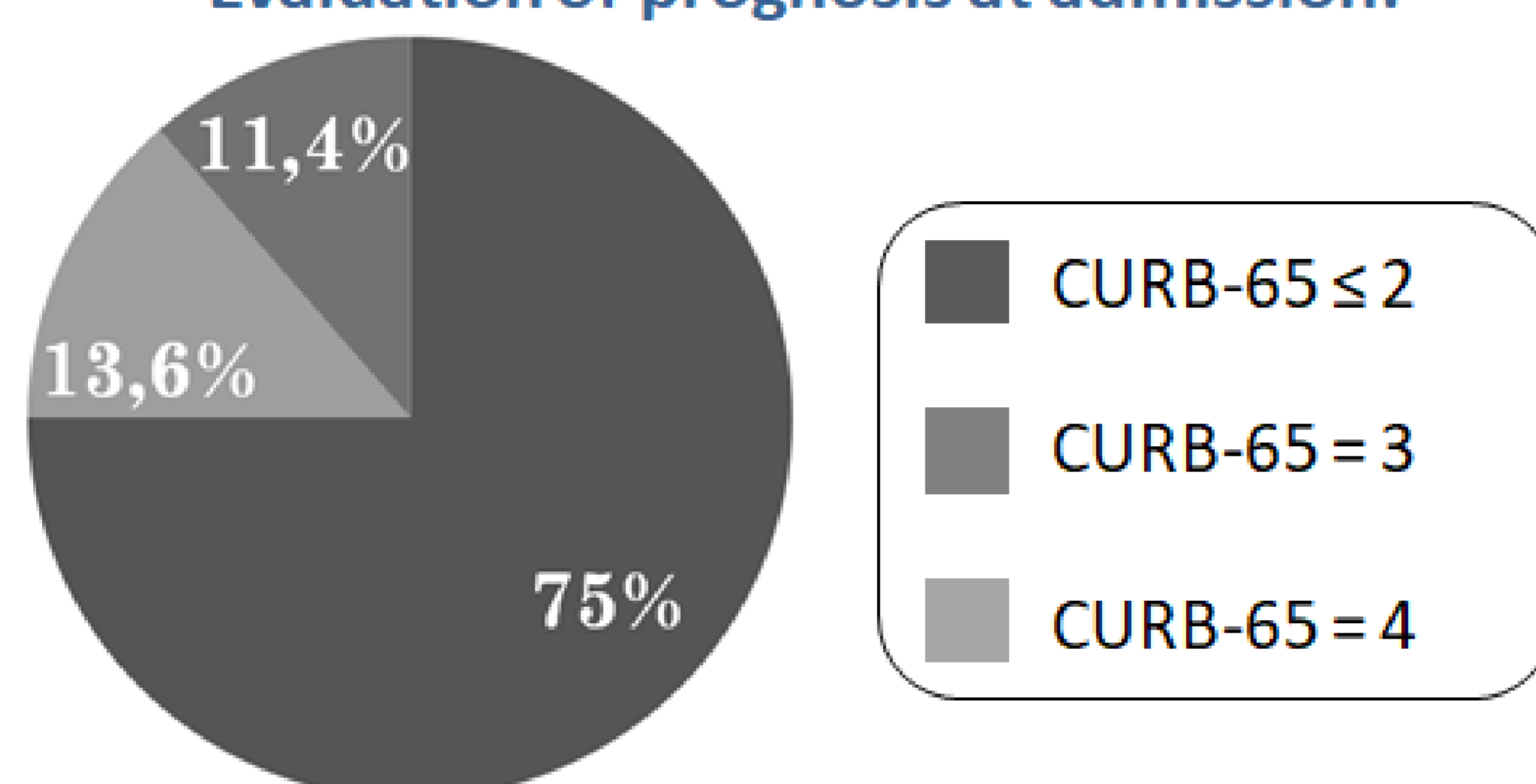
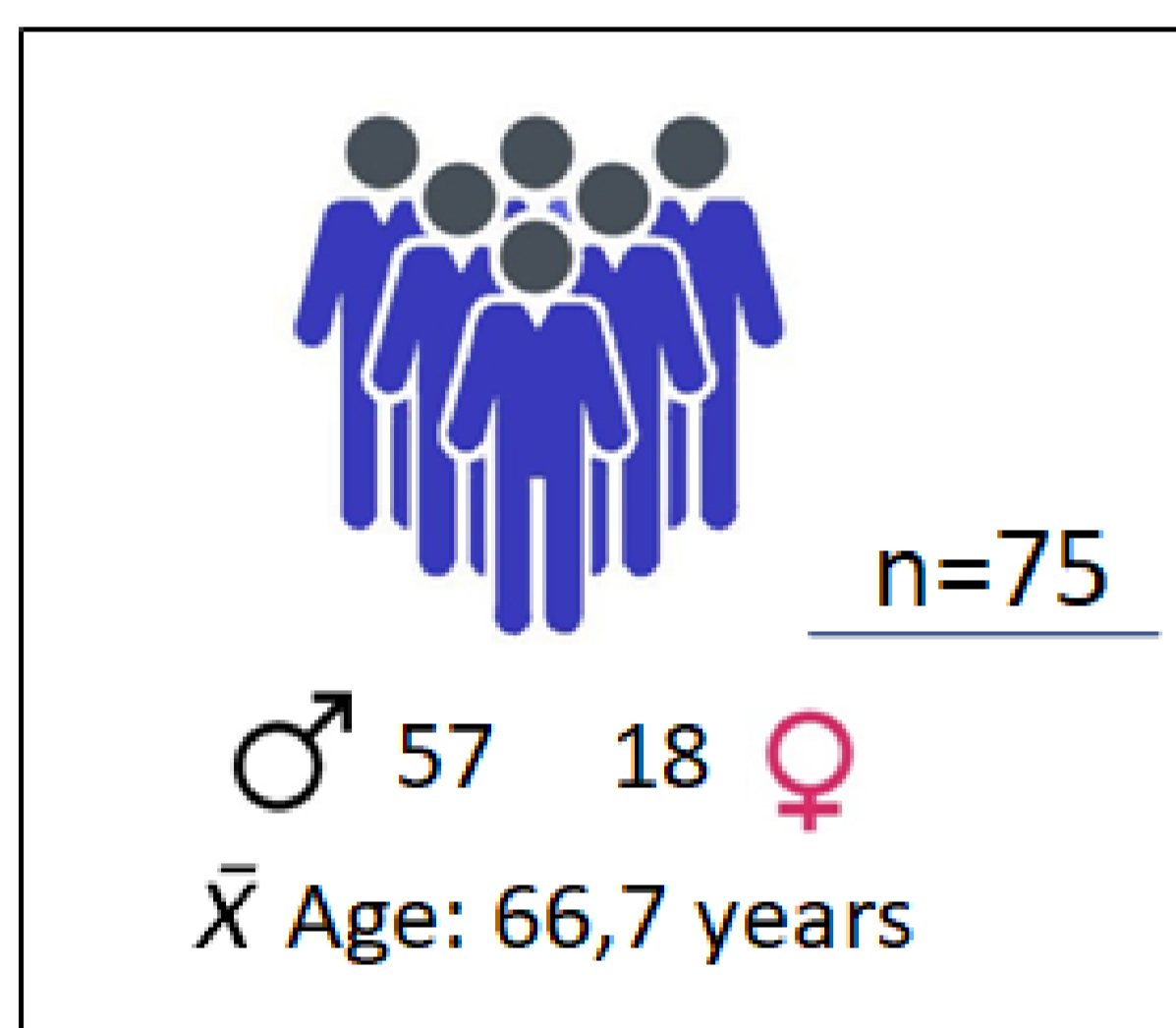
4. Statistic analysis → SPSS®-v23.0.

- Evaluation of the efficacy
 - ✓ Variation in C-reactive protein (CRP)
 - ✓ Variation in lymphocyte count (LC)

From the moment before tocilizumab treatment until 5 days later (day +5).
In all patients and separately in those who remained alive and the deceased.

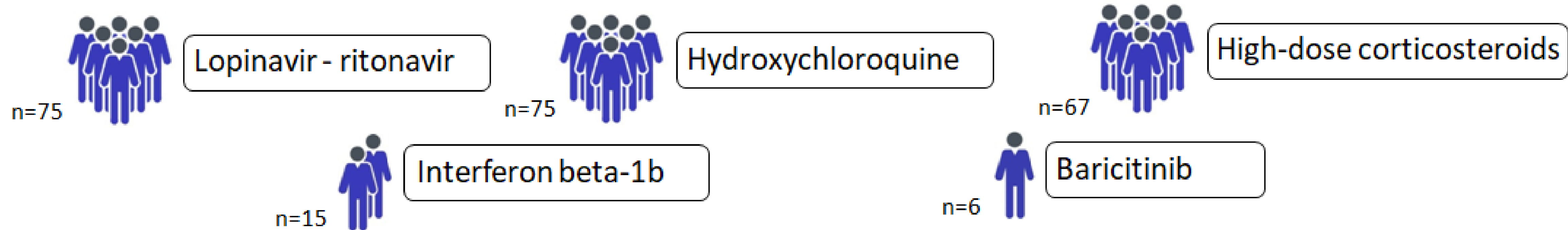
Results

Evaluation of prognosis at admission:



- ✓ X̄ Time symptoms – tocilizumab: 11.6 days
- ✓ Admissions to the intensive care unit: 17 patients
- ✓ X̄ Hospital stay : 19.7 días
- ✓ Deceased: 19 patients (25%)

Treatments received before tocilizumab:



	PCR media		RL medio	
	Before Tocilizumab	Day +5 Tocilizumab	Before Tocilizumab	Day +5 Tocilizumab
ALL	154,1 mg/L (95%CI=129.0-179.0)	15,2 mg/L (95%CI=8.6-21.4)	1080/μL (95%CI=360-1790)	1690/μL (95%CI=530-2860)
ALIVE	163,4 mg/L (95%CI=134.5-192.3)	13,1 mg/L (95%CI=8.9-17.3)	1180/μL (95%CI=280-2080)	1810/μL (95%CI=350-3270)
DECEASED	117,6 mg/L (95%CI=69.9-165.2)	23,2 mg/L (95%CI=0.0-52.0)	680/μL (95%CI=550-810)	1220/μL (95%CI=740-1700)

Conclusion and relevance

In patients with severe SARS-COV-2 pneumonia we found a significant decrease in CRP and an increase in LC associated with treatment with tocilizumab in the inflammatory phase of the disease. Both variations were greater in the patients who continued alive. The LC prior to treatment with tocilizumab in deceased patients was lower than in living patients.