



Abstract 4CPS-320 Figure 1 Patient allocation during the study period differed depending on the time post-transplant. Chronic-stage recipients (>1.5 years after HTx at the time of study inclusion) were included in the parallel RCT and were randomly assigned 1:1 to the control group or intervention group. Acute-stage recipients (<1.5 years after HTx at the time of study inclusion) were not included in the controlled trial and were directly offered the same treatment as the IG.

Face-to-face measurement points are shown as blue diamonds: T₀ (baseline at study inclusion), T₁ (at least 6 months after inclusion), T₂ (at least 12 months after inclusion). The measures assessed during in-clinic visits are shown as grey squares. The treatments are shown as pictograms, i.e. in-clinic outpatient hospital, multidisciplinary team including the pharmacist, and the mHeart mobile application to interact with the pharmacist. The green diamonds show the interaction through the mHeart tool.

Conclusion and relevance mHeart has been demonstrated to improve recipients' adherence to IS (85% IG vs 46% CG), patients' experience of therapeutic regimens and to reduce in-clinic facilities because of the mHeart follow-up. Innovative research projects on health institutions are typically short lived practices with lack of scalability to usual care. This was a priority for the mHeart study, and the intervention was extended into clinical practice in January 2019.

REFERENCES AND/OR ACKNOWLEDGEMENTS

- Gomis M, et al. JMIR mHealth and uHealth 2020.

Conflict of interest No conflict of interest

4CPS-321 ANAKINRA IN SEVERE COVID-19 PNEUMONIA: RETROSPECTIVE STUDY

¹MP Ortega-García*, ²F Puchades-Gimeno, ³F Sanz-Herrero, ⁴C Ferrer-Gómez, ⁵M García-Deltoro, ¹I Gil-Gómez, ¹A Moya-Gil, ¹A Bernalte-Sesé, ¹P Blasco-Segura. ¹Consorcio Hospital General Universitario De Valencia, Service of Pharmacy, Valencia, Spain; ²Consorcio Hospital General Universitario De Valencia, Internal Medicine, Valencia, Spain; ³Consorcio Hospital General Universitario De Valencia, Pneumology, Valencia, Spain; ⁴Consorcio Hospital General Universitario De Valencia, Intensive Critical Unit, Valencia, Spain; ⁵Consorcio Hospital General Universitario De Valencia, Infectious Diseases Service, Valencia, Spain

10.1136/ejpharm-2021-eahpconf.153

Background and importance Anakinra is a recombinant interleukin 1 (IL-1) receptor antagonist and might help to neutralise the acute respiratory distress syndrome (ARDS) related to the SARS-CoV-2 hyperinflammatory state.

Aim and objectives To evaluate the use of anakinra in severe COVID-19 pneumonia previously treated with tocilizumab.

Material and methods A retrospective study in a general university hospital with 503 beds was conducted. Patients or relatives gave oral consent for the use of anakinra. Posology was 100 mg/12 hours on day 1 and 100 mg/24 hours on days 2–5, given subcutaneously. All received thromboembolic

prophylaxis and were previously treated with hydroxychloroquine, azithromycin, corticosteroids and tocilizumab. Demographic variables, comorbidities, onset of symptoms and biochemical parameters (leucocytes, neutrophils, lymphocytes, platelets, haemoglobin, transaminases, LDH, creatinine, CRP, procalcitonin, CK, D-dimer, ferritin) at baseline and at discharge or death were recorded. The main outcome was mortality.

Results 17 patients were treated from 4 to 26 April. Median age was 69 years (IQR 12) and 11 (65%) were men. 15 (88%) patients had mechanical ventilation (MV). The main comorbidities were hypertension (8, 47%) and dyslipidaemia (11, 65%). 7 (41%) had two or more comorbidities. 11 patients (65%) were admitted after 7 or more days with symptoms, the median being 7.5 days (IQR 5.8). Median days of admission were 36 (IQR 35) and ICU admission was for 26.5 (IQR 35) days. Median days from the start of symptoms to treatment with anakinra was 18.5 days (IQR 6) and from the start of anakinra to discharge/death was 23 days (IQR 30.5). Baseline values of lymphocytes ($0.6 \times 10^9/L$, IQR 0.4), AST (38 U/L, IQR 28.5), ALT (59 U/L, IQR 99), CRP (1.6 mg/dL, IQR 9.6), LDH (735 U/L, IQR 368), D-dimer (1350 ng/mL, IQR 1734) and ferritin (928 $\mu g/L$, IQR 1736) were altered. At discharge/death, only lymphocyte count had improved significantly ($1.1 \times 10^9/L$, IQR 0.8, $p=0.003$). 10 patients (59%) died. Two patients did not finish treatment due to death, 3 due to elevated transaminases and 1 due to neutropenia.

Conclusion and relevance Mortality was high, but our population were critical patients with MV, ARDS and with a poor evolution despite having received other immunomodulatory treatments. Anakinra, like tocilizumab, must be used in earlier stages of the disease to reduce the inflammatory response. Delaying treatment does not provide benefits for patient cure.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest