

# EFFECTIVENESS AND COST OF ECULIZUMAB ON PATIENT WITH ATYPICAL (SHUa), URENIC AND HEMOLITIC SYNDROME, WITH ENLARGEMENT OF THE FREQUENCY OF ADMINISTRATION

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## Purpose

To compare effectiveness and cost of eculizumab (monoclonal antibody indicated for the treatment of atypical (SHUa), uremic and hemolytic syndrome) on a patient whom it is applied an enlargement of the frequency of administration as strategy of therapeutical optimization.

## Material and methods

Retrospective and observational study of adult patients with SHUa, treated with Eculizumab. Protocol treatment: Initial phase (4 weeks): 900/week; Maintenance phase: 1200 mg each 14+/-2 days. As clinic variables of effectiveness were determined: renal function (creatinine), hematologic function (platelets) and indicative parameters of haemolysis (Lactate Deshydrogenasa (LDH) and Haptoglobina). Data were taken from the program of economic management of pharmacy, from external patients and from clinic history of patient.

## Results

38 year old man with suspicion of outbreak, compatible with SHUa (which finally it was confirmed through genetic study) which was begun with Eculizumab, after persistence of renal insufficiency and haemolysis. He has received 24 doses in all. After 20 doses (adjusted to the administration protocol), his good renal response and normalization of the rest of clinic variables permitted to carry out a pharmacy-therapeutic optimization through enlargement of posology interval to each 30 days. The average values obtained during that period, before enlarging the frequency, were: of creatinine: 1,9 mg/dl; platelets: 150.109/L; LDH: 465 UI/L; haptoglobuline: 130 mg/dL and the cost reflected, from that monthly period was 31100 €. After the change, he has received 4 doses and it was maintained his analytic and clinic stability. The determined average values of creatinine, platelets, LDH and Haptoglobuline were 1,47 mg/dL, 160.109/L, 337UI/L, 136 mg/dL respectively, and the monthly cost was 15550 €.

## Conclusions

Eculizumab has showed a significant renal improvement, avoiding progression to techniques of dialysis, a good hematologic response and improvement of intervascular haemolysis. The enlargement in the frequency of administration do not suppose a deterioration of the effectiveness, and it is observed a monthly saving of 15550 €, what it would suppose an annually saving of 186.000 €, and because of that the treatment efficiency improves. The pharmacy service must implicate itself, actively, on introducing strategies to personalizing the pharmacy-therapeutic treatment of economic high impact and sanitary.