

EFFECT OF MONOCLONAL ANTIBODIES TO PREVENT PROGRESSION TO SEVERE COVID-19 DISEASE: REAL LIFE DATA OF A UNIVERSITY HOSPITAL



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Background and importance

Since February 2021, our National Medicines Agency has temporarily authorized for emergency use the monoclonal antibodies to treat Covid-19 disease.

Furthermore, first authorized and most used ones in our Hospital were bamlanivimab-etesevimab monoclonal antibody combination, casirivimab-imdevimab combination and sotrovimab.

Monoclonal antibody therapy for Coronavirus disease 2019(COVID-19) is recommended in mild to moderate disease patients who are at risk of progressing to severe disease, with at least one risk factor, including age over 65.





Aim and objectives

Aim of the study is to evaluate the effect of monoclonal antibody therapy for Covid-19 to prevent disease's progression, hospital admissions and deaths.

Material and methods

Data related to treated patients from 29/03/2021 to 02/05/2022 were collected from our National Medicines Agency database. These data were: sex, age, outcomes of the treatment and antibody administered.

Results

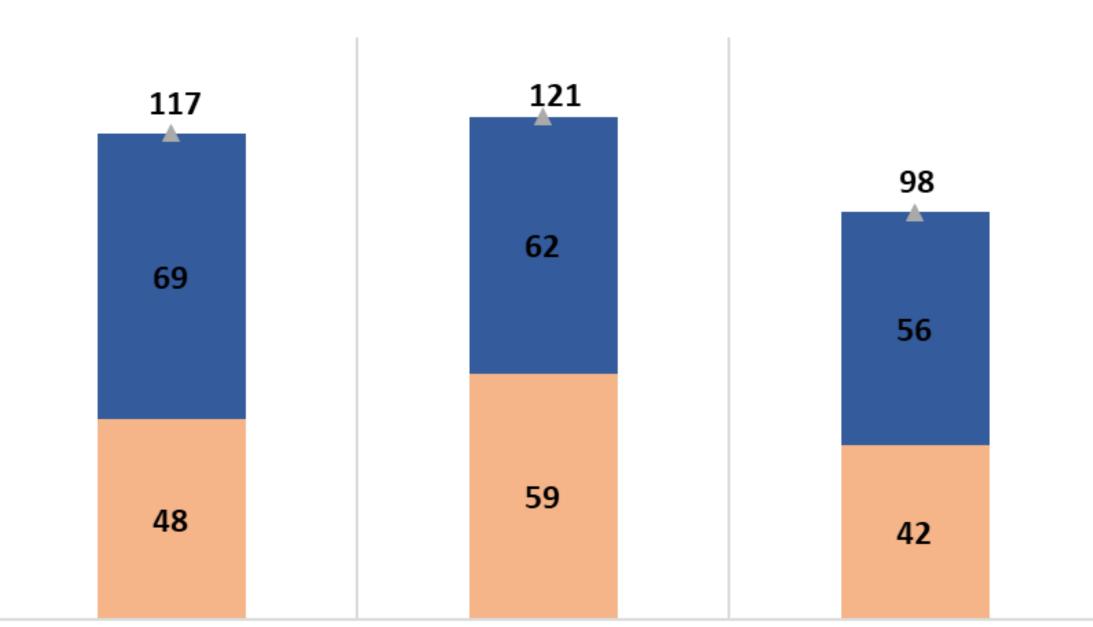
336 patiens were treated in our Hospital from 29/03/2021 to 02/05/2022.

Patients treated with bamlanivimab-etesevimab (700mg+1400mg) combination were 117: 48 females (F);69 males (M); 64 patients aged over 65. These patients were treated with this combination from 29/03/2021 to 29/12/2021. The outcomes were: 112 healings, 3 hospitalizations or emergency department visits, 1 death, 1 not available.

Patients treated with casirivimab-imdevimab combination (1200mg+1200mg) were 121: 59 F and 62 M; 72 patients aged over 65. These patients were treated with this combination from 16/07/2021 to 31/12/2021. The outcomes were: 110 healings, 9 hospital discharges (2 patients, treated with high dosage (4000mg+4000mg), were hospitalized for covid-19 while 7 were hospitalized for other reasons), 2 hospitalizations or emergency department visits.

Patients treated with sotrovimab (500 mg) were 98: 42 F and 56 M; 38 aged over 65. These patients were treated with this antibody from 29/12/2021 to 02/05/2022. The outcomes were: 96 healings, 1 hospital discharge (hospitalized for other reasons) and 1 not available.

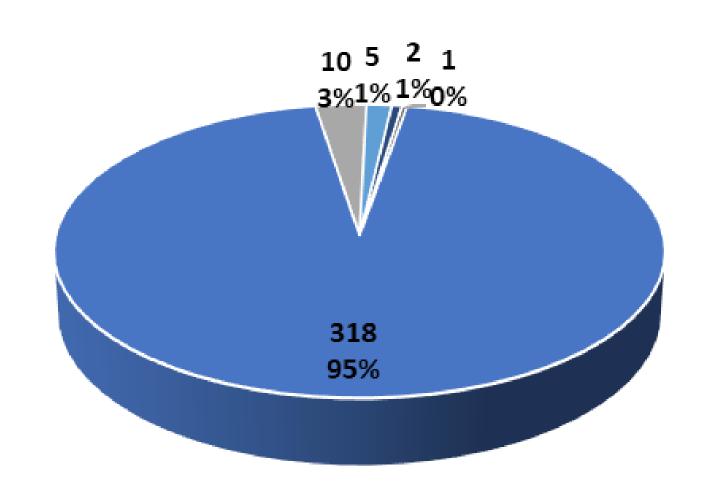
Number of treated patients



casirivimab-imdevimab

sotrovimab

Outcomes



Healings

bamlanivimab-etesevimab

- Hospital discharges
- Hospitalizations or emergency department visits
- Not available
- Death



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Conclusion and relevance

The administration of monoclonal antibodies in patients with COVID-19, with comorbilities, who are at risk of severe disease's progression reported a reduced risk of hospitalization or death (only 5 hospitalizations or emergency department visits and 1 death on 336 treated patients).