abstract number: 6ER-025

Real-life use of remdesivir in hospitalized COVID-19 patients with severe pneumonia: an observational study from an Italian University Hospital

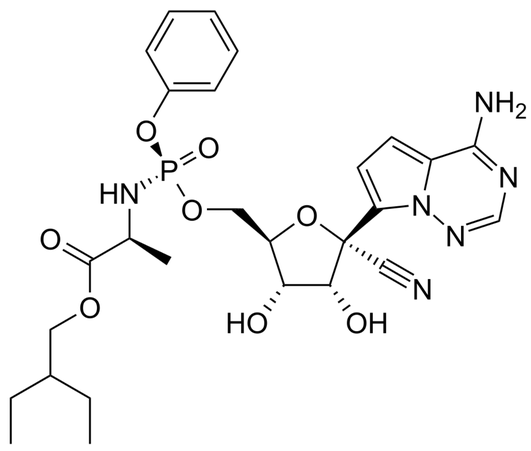
L. Pivato (1), M. Bettio (1), D. Mengato (1), G. Iadicicco (1), S. Faoro (1), M. Mazzitelli (2), A.M. Cattelan (2), F. Venturini (1)

1.Department of Pharmacy, University Hospital of Padova, Padua, Italy
2.Infectious Disease Unit, University Hospital of Padova, Padua, Italy

BACKGROUND AND IMPORTANCE

Since June 2020, the European Medicine Agency (EMA) has approved with conditions the antiviral drug Veklury® (**remdesivir**) as a treatment for COVID-19 pneumonia.

Many studies have shown conflicting results regarding the efficacy of remdesivir. Data from observational studies should be encouraged, in order to provide valuable information about its effectiveness in real life.



AIM AND OBJECTIVES

Retrospective observational monocentric study:

- Primary endpoint: mortality rate of patients treated with remdesivir at any time after initiation of therapy;
- Secondary endpoints: 30-days mortality and duration of hospitalisation.

MATERIALS AND METHODS

Our cohort included all patients who received remdesivir between September 2020 and April 2021.

Homogeneous pandemic situation: second and third pandemic waves in Italy

The high incidence of patients requiring high-flow oxygen after starting remdesivir led us to analyse two subgroups in a post-hoc analysis:

HFO group: patients with high-flow oxygen supplementation

NHFO group: patients who didn't require high-flow oxygen supplementation

- High-quality data: medical records and Veklury® AIFA monitoring register (https://www.aifa.gov.it/en/web/guest/registri-farmaci-sottoposti-a-monitoraggio).
- Statistical analysis: carried out with R (R Core team 2021).
- The study was notified to our local Ethical Committee.

RESULTS

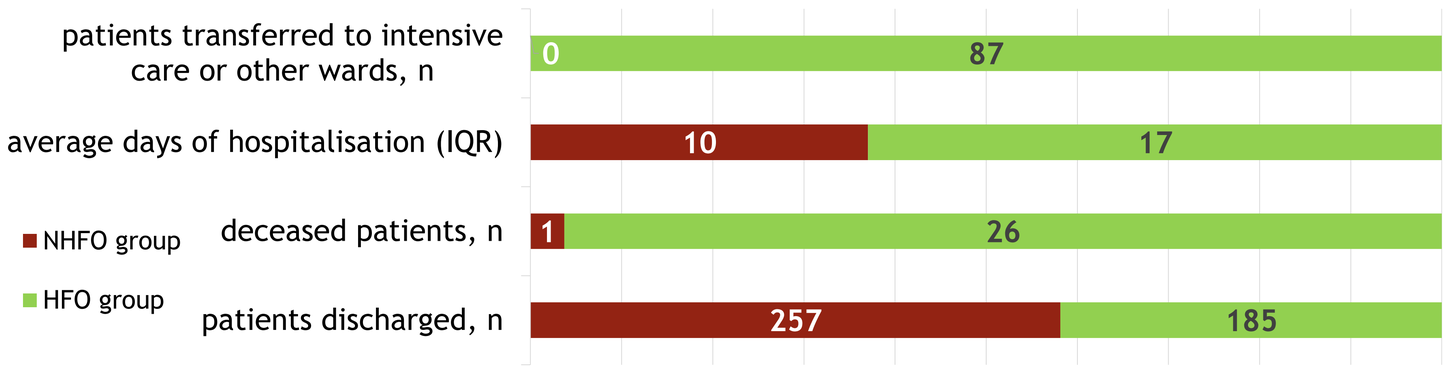
We included 528 patients, mainly men (68.4%) with a median age **of 66.7 years.**

Our results documented an overall mortality rate of 5.1%.
30-days mortality rate drops to 4.2%.

In the post-hoc analysis we distinguished 291 patients (55.1%) in the NHFO group and 237 (44.9%) in the HFO group.

HFO therapy confirmed a stronger association with mortality.

	NHFO group	HFO group	P
number of patients discharged (%)	257 (88.3)	185 (78.1)	0.002
number of deceased patients (%)	1 (0.3)	26 (11.0)	<0.001
average days of hospitalisation (IQR)	10 (8-16)	17 (10-25.75)	<0.001
transfer to intensive care or another ward, n (%)	0 (0.0)	87 (36.7)	<0.001
median overall survival days (IQR)	3 (NA)	14.5 (11-19)	<0.001



The NHFO group performed better in all the considered endpoints: rate of discharge at home, mortality and intensive care unit admission/transfer, length of hospital stays.

CONCLUSION AND RELEVANCE

In our study, the mortality rate was similar to many clinical studies, confirming that remdesivir can be considered a therapeutic option, especially due to its good safety profile.

During the analyzed period no reports of potential adverse reactions were recorded

Patients who have required highflow oxygen are at increased risk of bad outcomes.

This seems to suggest that a potential early use of remdesivir could optimize its clinical efficacy.

Contacts: lisa.pivato@aopd.veneto.it