SUBGROUP ANALYSIS ABOUT EFFICACY OF EARLY USE OF REMDESIVIR IN COVID-19

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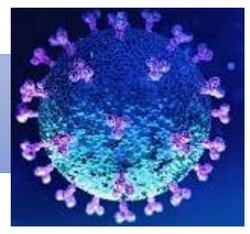
J05 - Antivirals for systemic use

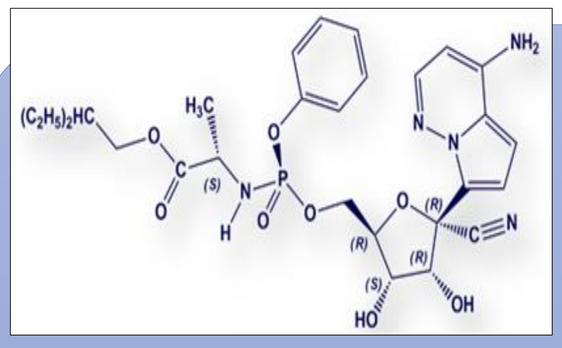
BACKGROUND

✓ A **greater benefit** was suggested in **early treatment** of **remdesivir** against **COVID-19**



AIM

To develop a **systematic review** and **methodological interpretation** of **subgroup analyzes** according to **timing** use of **remdesivir** in COVID-19



MATERIAL AND METHODS

Bibliographic review in MEDLINE® (October 10, 2020)

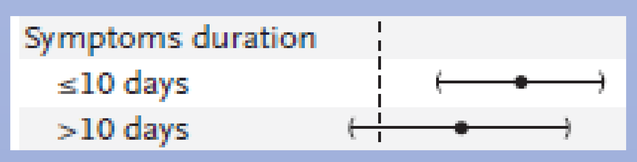
- ✓ Search strategy in “Clinical Queries/Narrow” tool: ***[(Therapy/Narrow[filter]) AND (remdesivir AND covid)]***
- ✓ Selection criteria: Randomized clinical trials **(RCTs)** with **subset analysis** about **early and late use** of remdesivir (≤10 *vs* >10 days from symptom onset, or ≤9 *vs* >9 days)
- ✓ **Endpoints:** All outcomes with subgroup analysis regarding timing of remdesivir
- ✓ Two **methodologies**
  - **1º** Consideration of statistical interaction, prespecification, biological plausibility and consistency of subgroup analysis
  - **2º** Validated tool with preliminary questions to discard subgroup analyzes without minimal relevance and checklist → Score with recommendations of applicability in clinical practice

RESULTS

Results of bibliographic review:
20 results

17 results excluded
- ✓ 16 without design of RCT
- ✓ 1 without efficacy evaluation of remdesivir

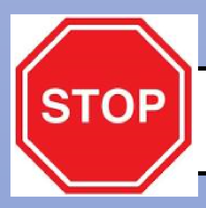
3 RCTs included



Endpoints considered: time to clinical improvement, mortality, viral load, clinical status at days 11 and 15

1º Methodology

- ➢ Heterogeneity of subgroups: **no statistical interaction** in outcomes of RCTs
- ➢ Pre-specification: in **time to clinical improvement**, and **clinical status at day 15** of **a RCT**
- ➢ Biological support: It was reasoned in **each endpoint of RCTs.**
- ➢ Consistency: **No consistency** of subgroup analyzes were showed



2º Methodology (validated tool)

Preliminary questions discarded applicability of subset analysis in 2 RCTs (**absence of minimal relevance).**
Recommendation in the third RCT: checklist recommended a **“null”** recommendation (**score: -3 points**) of clinical applicability was reached for **clinical status at day 11**

CONCLUSION

No differences were found between early and late use of remdesivir in COVID-19. We developed the **first** study with **systematic review** and **methodology** about **subgroup analysis of timing** use of **remdesivir**.

REFERENCES AND/OR ACKNOWLEDGEMENTS

[1]Sun X, *et al*. How to use a subgroup analysis: users’ guide to the medical literature.JAMA. 2014;311(4):405-11
[2]Gil-Sierra MD, *et al*. Checklist for clinical applicability of subgroup analysis.J Clin Pharm Ther. 2020;45(3):530-8.