



Safety and Efficacy of Antiviral Drugs for the Treatment of Patients with SARS-CoV-2 Infection: A Systematic Review and Meta-analyses

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Abstract:

Objective: To systematically review the safety and efficacy outcomes of using antivirals for the treatment of COVID-19.

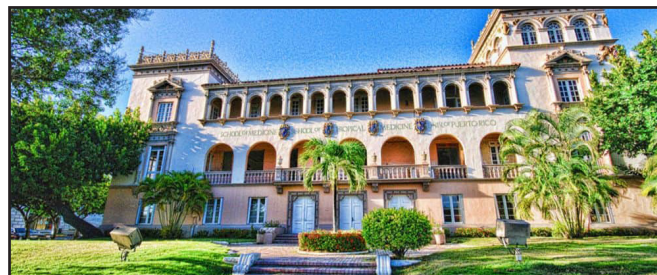
Methods: Five databases were screened from inception to 27-Aug-2020. The effects of specific drug interventions on safety and efficacy were assessed in COVID-19 patients. Risk Ratios (RRs) with corresponding 95% confidence intervals (CIs) were pooled using random-effects models.

Results: A total of 10 studies were identified which fulfill the inclusion criteria. Patients taking antivirals had 26% less risk of having a severe adverse event (SAE) compared to controls (RR, 0.74, CI:0.62 to 0.89, P=0.002). Clinical improvement at day 14 was observed among the cases treated with antivirals compared to the control group (RR 1.24, CI: 1.00 to 1.53 p=0.05).

Conclusion: There is evidence that Remdesivir and LPV/r reduces the hospital length of stay and that patients to which antivirals were administered had less SAE and improvement when compared to patients not prescribed with antivirals. Due to a lack of power and the quality of the studies, it was not possible to determine which antivirals have a greater risk-benefit balance, and therefore the optimal approach to antiviral treatment is still uncertain.

Biography:

Mrs Zuleika Aponte Torres gained hid Phd at University of Puetro Rico School of Medicine, Chile. Highly skilled professional with experience in: Health economics, outcomes Research, epidemiology, Health Technology Assessment, pharmacoepidemiology, drug safety and risk management, study design, medical writing, regulatory consulting, data analysis and reporting, rare disease research, nutritional epidemiology. Epidemiologist Team Lead for the methods and analytics team. Provide med-



ical facilities, states, regions, and the nation with data collection and reporting capabilities needed to: Identify infection prevention problems by facility, state, or specific quality improvement project, benchmark progress of infection prevention efforts, comply with state and federal public reporting mandates, and ultimately, drive national progress toward elimination of Healthcare-associated Infections (HAIs).

Publication of speakers:

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2. Aponte, Zuleika & Lara, N. & Primatesta, Paola & Trylesinski, Aldo. (2011). PIN14 Prescribing Patterns of Sebivo® (Telbivudine): A Survey Among Physicians in Selected European Countries. *Value in Health - VALUE HEALTH*. 14. 10.1016/j.jval.2011.08.202.
3. González-Pérez, Antonio & Aponte, Zuleika & Vidaurre, Carlos & Garcia-Rodriguez, Luis. (2010). Anaphylaxis epidemiology in patients with and patients without asthma: A United Kingdom database review. *The Journal of allergy and clinical immunology*. 125. 1098-1104.e1. 10.1016/j.jaci.2010.02.009.

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