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Spotlight on Special Topics

META-ANALYSIS OF SAFETY AND EFFICACY OF RENIN ANGIOTENSIN ALDOSTERONE SYSTEM INHIBITORS IN COVID-19 POPULATION

Poster Contributions Sunday, May 16, 2021, 2:45 p.m.-3:30 p.m.

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Background: The safety and efficacy of Renin Angiotensin Aldosterone System Inhibitors(RAASi) in COVID 19 patients has been controversial.

Methods: Digital databases were queried for relevant articles. A random-effect model was used to compute an unadjusted odds ratio (OR).

Results: A total of 49 studies were included in the analysis yielding 82,610 COVID-19 patients (RAASi n=34357; No RAASi n=48253). The mean age was 64 years old and 57% of the sample was male. RAASi has similar mortality outcomes as compared to the non-RAASi group (OR-1.07; 95% CI: 0.74-1.15; p-0.08) (Figure 1). Significant improvements in seroconversion, including negative RT-PCR was found with RAASi (OR-0.96; 95% CI 0.93-0.99; p-0.02). Patients with RAASi can have higher in-hospital admission requirements (OR-1.12; 95% CI 1.04-1.21; p-0.004). We also found non-significant associations of RAASi with improvement in progression to ICU admission (OR- 0.99; 95% CI 0.79-1.23; p-0.9) and higher odds of worsening of clinical manifestations (OR-1.04; 95% CI 0.97-1.11; p-0.2) as compared to the absence of RAASi (Figure 1).

Conclusion: RAASi could be considered safe in patients with COVID-19. A continuation of RAASi can bring favorable outcomes including seropositivity/viral clearance and less inpatient hospitalization.

