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☆ **Spotlight on Special Topics**

NO EXCESS MORTALITY ASSOCIATED WITH CONCOMITANT ACE INHIBITOR OR ARB USE IN HOSPITALIZED PATIENTS WITH COVID-19

Poster Contributions
Saturday, May 15, 2021, 12:15 p.m.-1:00 p.m.

Session Title: Spotlight on Special Topics: COVID 2
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)

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Background: We sought to assess the impact of Angiotensin-converting enzyme /Angiotensin II receptor blockers (ACE-I/ARB) use on short term mortality in patients with COVID-19 infection using a large multinational registry.

Methods: We identified adult patients with COVID-19 infection in the TriNetx Research Network between January 20, 2020 and October 29, 2020. Patients were then divided into those who had an ACE-I or ARB on their medication list on admission (ACE-I/ ARB cohort) and those who did not (no ACE-I/ARB cohort). We compared all-cause mortality between propensity matched (PSM) cohorts.

Results: A total of 152,316 patients were included. Of those, 27,762 (18.2%) were on ACE-I or ARB and 124,554 (81.8%) were not on ACE-I/ARB. Patients in the ACE-I/ARB group were older (62.6±14.4 vs. 44 ±17.7 years, P<0.001), more likely to be males (50.0% vs. 44.0%, P<0.001), and more likely to be of Black race (29.0% vs. 14.4%, P<0.001). They also had higher prevalence of key co-morbidities. In the PSM cohorts, all-cause mortality occurred in 1,021/19,281 (5.29%) and 965/19,281 (5.00%) patients in the ACE-I/ARB vs. no ACE-I/ARB cohorts, respectively [(Risk Difference 0.29% (-0.151% - 0.732% P=0.20)]. Kaplan Meier survival analysis confirmed the lack of statistically significant association between ACE-I/ARB use and all-cause mortality (P=0.66).

Conclusion: In a large multi-national database of patients with COVID-19 , we observed no association between ACE-I/ARB and short-term all-cause mortality.

