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**Abstract Topic:** - Statistical genetics and genetic epidemiology

Abstract Title: - Genetic insights on relationships between hypertension, diabetes and COVID-19: a

systematic review of Mendelian randomization studies

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**Aims:** - In the present study, our aim was to understand the landscape of comorbidities where causalities have been established in MR studies related to susceptibility, severity, and outcome of COVID-19. Additionally, we sought to comprehend the relationship between hypertension, diabetes and COVID-19.

Methods: - Systematic Review

**Results:** - In this study, we screened a total of 173 MR articles. MR studies have reported strikingly opposing findings, where no direct causal relationship could be established between either hypertension or type-2 diabetes and COVID-19.

**Conclusions:** - Hypertension and diabetes seem to be linked to COVID-19 with shared risk factors rather than as independent risk factors.

Keywords: - COVID-19, Hypertension, Diabetes, Mendelian randomization, Systematic review