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Author's response to: Comment on "The atherogenic index of plasma as a predictor of mortality in patients with COVID-19"

This paper is the response for the letter to the editor named Comment on "The atherogenic index of plasma as a predictor of mortality in patients with COVID-19" by Vasavada et al. (Vasavada A, Llerena-Velastegui J, Vaca-Perez P. Comment on "The atherogenic index of plasma as a predictor of mortality in patients with COVID-19". *Heart Lung*. 2022 Aug 29;57:65. doi: 10.1016/j.hrtlng.2022.08.018. Epub ahead of print. PMID: 36081180; PMCID: PMC9420705.)

Author's response to: Comment on "The atherogenic index of plasma as a predictor of mortality in patients with COVID-19".

First of all, we would like to thank you very much for your interest in our article, we are very honored by your kind words and interest in our study.^{1,2}

We used binary logistic regression analysis because we divided the study population into two groups, the survivor group and the deceased group and compared them. We included the comorbidities such as hypertension, diabetes mellitus, etc. You mentioned that we should also include the patients under statin therapy. We excluded the patients under dyslipidemia treatment because we evaluated the lipid profile at the admission. We thought that if we included these patient, the lipid profile parameters will not be reliable because they will already be lower than expected. The aim of this study was not to evaluate the effect of statin therapy on mortality of COVID-19 patients. Also as far as we know, our study is the first study to define the changes of lipid profile on COVID-19 patients. So our study may guide other scientists to evaluate the effects of statin therapy on these patients.

As you mentioned, our study population is small. It is because this is a single centered study and we only included the patients admitted at a 3 months of period. COVID-19 pandemia started at March 2020 in our country. We evaluated the patients who admitted to our hospital between 20.03.2020 to 26.05.2020. We wanted to publish our results as soon as possible because we were not familiar with this new virus at that time and every information and data was very valuable. As you stated, it would be better if our study population was larger but we did not want to wait any longer.

You also stated that we should mention AIP as a trustworthy and independent value for stratifying multiple cardiometabolic risks in COVID-19 patients. AIP is already a defined risk factor for cardiovascular system diseases.³⁻⁵ Our aim in this study was to show that AIP

is an indicator of COVID-19 mortality independent of cardiovascular diseases. Also as you mentioned ethnicity is important for COVID-19 patients it would be better if we specify the ethnic differences of our patients. Nafilyan et al. conducted their study in England and stated the importance of ethnicity in COVID-19 pandemic and showed that it may define the risk of bad prognosis and mortality.⁶ But our study is conducted in a single center and our city is ethnically mostly homogeneous.

References

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Özge Turgay Yıldırım*

Şeyhmus Kaya

Eskisehir City Hospital, Department of Cardiology, Eskişehir, Turkey
Eskisehir City Hospital, Department of Emergency Medicine, Eskişehir, Turkey

*Corresponding author at: Özge Turgay Yıldırım, Eskişehir Şehir Hastanesi, Kardiyoloji Polikliniği, Odunpazarı, Eskişehir, Turkey.
E-mail address: ozgeturgay@gmail.com (Ö Turgay Yıldırım).