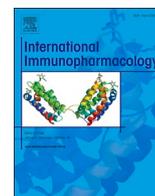




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## Comment on: Safety and efficacy of Favipiravir in moderate to severe SARS-CoV-2 pneumonia

We wish to offer a few comments for the data published by Solaymani-Dodaran et al. [1]. The paper's conclusion was that Adding Favipiravir to the treatment protocol did not reduce the number of ICU admissions, intubations, or In-hospital mortality compared to the Lopinavir/Ritonavir regimen. The authors inferred one possible explanation for their negative findings regarding the efficacy of Favipiravir in SARS-CoV-2 pneumonia suggested that in some studies [2–9], it could be the proposed mechanisms for the pathogenicity of this virus.

However, several studies have explicitly mentioned the active and efficient effect of Favipiravir in the first 5 days of the infection [10,2–9]. These studies were not mentioned in the article published by the authors.

It appears a number of non-pharmacological factors led to the lack of observation of suitable effect of Favipiravir on the patient outcomes. These factors included not using noninvasive ventilation (NIV), early intubation – which was so common at the beginning of the epidemic in Iran, heterogeneity in ICU admission, the absence of an intensivist to schedule the patients, differences in geographical level, and different standards of care services in centers. Any criteria or scoring system to determine the severity of disease such as Acute Physiology and Chronic Health Evaluation (APACHE) and Simplified Acute Physiology Score (SAPS) have not been applied to classification of patients [11,12]. Major problems such as early intubation of patients may have serious consequences contributing to the weak outcomes, including high rates of mortality. In addition to the vague cases mentioned, the type of Favipiravir drug used in this study is not clear. The trial cited in the study was based on Favipiravir produced by Chinese companies, whereas in the paper's introduction section, the authors introduced Avigan produced and utilized in Japan, which is not available in Iran.

Thus, despite not controlling the above factors, the reliance on results of the study that indicated ineffectiveness of Favipiravir, which led to the authors' recommendation that it is not necessary to include in the treatment protocol, must be made with more caution.

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