

lung cancer), the use of historical chemotherapies (anthracyclines and cisplatin) is less frequent, particularly where new drugs have revolutionised the prognosis of patients.

Author's Note

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Tyrosine kinase inhibitors and COVID-19

Response to Letter to the Editor:

Dear Editor,

We would like to thank the authors for reading our paper and preparing a letter regarding our article and also thankful to the editor for the opportunity to respond.

This letter is in response to the letter which argued that our paper¹ has methodological flaws. In the letter, the authors stated that since we allocated a control group from the community, the selection of the comparison group was not precise, and the findings of the study were over implicated.

We appreciate the concerns of the authors about the methodology of the study. It is demonstrated that after the introduction of tyrosine kinase inhibitors, CML patients now have much better survival compared to other malignancies.² TKIs were shown to be active against coronaviruses.^{3,4} The TKIs activity against SARS-CoV-2 may be valuable regarding clinical outcomes which was the rationale of the study. In the study, we have COVID-19 infected CML cases and age, gender, comorbidity, and COVID-19 medications matched control group without CML or another cancer. The research was aimed at exploring the clinical course of CML patients with COVID-19 and comparing them with identical patients from the community. While this is an observational analysis, we picked a control group from a population with comparable characteristics to add more significance to our results.

To be methodologically correct, authors suggested as a control group, CML patients without TKI or patients without CML used TKIs for COVID-19 should be picked. Implementing a group of CML patients not receiving TKIs would not be feasible, as TKIs have now become standard of care, detection of CML patients not receiving TKI and/or cessation of TKIs in CML patients when COVID-19 confirmed-which has no evidence so far- that would not have been ethically justifiable. In addition, as proposed by

the authors, it is not realistic to select a control group of patients without CML using TKIs for COVID-19, since TKIs are not approved for the treatment of COVID-19 and thus the administration of TKIs to the population for the treatment of COVID-19 is not ethically justifiable which is a subject of randomized clinical trials.

Our observation and conclusion stated the study demonstrated the clinical course of COVID-19 is not worse in CML patients receiving TKIs than control groups. Further, we observed that the rates of ICU admission and MV support, CFR were lower, and length of hospital stay was shorter in CML patients receiving TKI to the control group, but these differences were not statistically significant. The study highlights that to find out whether the TKIs are associated with a better course of COVID-19 or not, large scale prospective and randomized studies should be conducted. "CML patients receiving TKI may have non-inferior outcomes compared to the community" was our conclusion. Breccia et al. observed the incidence of COVID-19 infection was extremely low in CML patients receiving TKIs. After examining cases of CML and PH+ALL, they suggested TKIs may have the potential role of protecting patients from COVID-19.⁵ For more clear answers, randomized studies are needed as one started [EudraCT2020-001236-10]. After all, we do not think that this would be the interpretation of the article. We do not believe that the article has such a purpose.

Sincerely yours

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