We thank the Editor and the reviewers for their kind and honest review of the article. We appreciate all the edits and suggestions made for the critical appraisal of the article aimed towards it's overall improvement. We have incorporated all the edits and suggestions provided and addressed them as below,

# Editor Query 1:

Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide the original figure documents. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023.

### Author's response 1:

The Figures included in this article have been included in a separate powerpoint file with the Copyright information incorporated in the bottom right hand side and it has been included in the revised submission

# Editor Query 2:

Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned.

### Author's response 2:

The current Tables in the article have been edited to fit the required three line table standard.

Editor Query 3:

When revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision

# Author's response 3:

RCA has been utilized by the authors and the following line was incoporated in the article to demonstrate the same,"The modalities of Medline, Pubmed and RCA were utilized to analyze high impact articles relevant to the current field of study and were incorporated in the discussion." (Page 5, Para 3, Line 9)

### Reviewer 1:

In this retrospective study of 118 patients with COVID-19 combined with stage IIIb-V chronic kidney disease, the authors aimed to illustrate the correlation between CRP, ferritin, and D-dimer levels and invasive and noninvasive mechanical ventilation, thus demonstrating a good clinical predictive value for the need for mechanical ventilation in the COVID-19 combined with chronic kidney disease population. The article is better structured with adequate data. There are a few shortcomings, and the authors are advised to revise them.

# Reviewer's Query 1

1. The authors found that CRP, ferritin, LDH, and D-dimer were good predictors of invasive mechanical ventilation, and CRP, ferritin, and D-dimer were good predictors of noninvasive mechanical ventilation, and further clarification of the mechanism or rationale for this is recommended.

# Author's Response 1

Although the pathophysiology explaining elevated LDH levels in patients requiring invasive mechanical ventilation but not amongst patients requiring non-invasive mechanical ventilation is not explicitly clear, we hypothesize that this could be secondary to the LDH cutoff that was used to define levels as elevated. LDH enzyme plays a prominent role in active metabolism and levels are elevated with minor abnormalities such as tissue hypoxia and lysis necessitating a higher cutoff to detect significantly elevated LDH levels. The following line was incorporated in the article to demonstrate the same," Although the pathophysiology explaining elevated LDH levels in patients requiring invasive mechanical ventilation but not amongst patients requiring non-invasive mechanical ventilation is not explicitly clear, we hypothesize that this could be secondary to the LDH cutoff that was used

to define levels as elevated. LDH enzyme plays a prominent role in active metabolism and levels are elevated with minor abnormalities such as tissue hypoxia and lysis necessitating a higher cutoff to detect significantly elevated LDH levels". (Page 13, Para 1, line 10)

### Reviewer's Query 2

2. Further clarification is recommended as to why the authors chose patients with stages IIIb-V chronic kidney disease.

Author's Response 2

As per previous studies ," With the progression of kidney disease (CKD stages 1-4), there was a significant increase of inflammatory and procoagulant markers" - Ref 8. Although there was a progressive increase in inflammatory marker levels with progression of the stage of CKD, a significant rise in inflammatory marker levels was noted only in stages IIIb-V. In addition, the risk of mortality in CKD stages rose significantly in stages IIIb-V. The following line was incorporated in the article to demonstrate the same," CKD stages IIIb-V was selected since there was a significant increase in mortality rate amongst patients with CKD IIIb-V." (Page 15, Para 1, Line 8)

3. Proposed the addition of references at "In our study, the demographic variables were similar to the previous studies.", "Initial studies demonstrated increased levels of inflammatory markers in COVID-19 patients that directly correlated with the disease severity." and "Although markers such as interleukin-6 (IL-6) were initially explored, they are costprohibitive and thus unsuitable for routine monitoring in COVID-19 patients.".

We appreciate the reviewer's suggestion to incorporate the appropriate references. We have added the following references for the appropriate statements,

In our study, the demographic variables were similar to the previous studies –Reference 4 & 5

(Page 14, Para 1, Line 1)

Initial studies demonstrated increased levels of inflammatory markers in COVID-19 patients that directly correlated with the disease severity - Reference 5 & 6

(Page 14, Para 2, Line 2)

Although markers such as interleukin-6 (IL-6) were initially explored, they are cost-prohibitive and thus unsuitable for routine monitoring in COVID-19 patients. - Reference 4

(Page 14, Para 2, Line 4)

4. It is suggested that the word "Discussion" in the ABSTRACT section be replaced by the word "Conclusion".

We have replaced the word in the abstract. (Page 2)

Thank you very much for reading our article with interest and carefully picking up points for improvement. We highly appreciate your input and thought for the revision of the article. We have considered all your comments carefully and please find below our responses,

### 1:

### **Comment:**

You've wisely noted that "a significant difference was observed only in steroid use between patients on NIMV compared to those without (84.6% vs 66.7%, P = 0.01) (Table 1)", However, this is not the only one, please revise your statistics regarding remdesivir as well in this comparison (61.5% vs 48.5%) as it seems identicial to one the yielded P = 0.01 yet you've written it as P = 0.84. More importantly, please change your remark "We noticed a significantly increased steroid administration rate in the NIMV group compared to the no MV group, possibly due to the greater severity of the disease" to a less conclusive one e.g. that could or could not be reasoned for the greater severity of the disease as many other literatures have argued the real benefit of steroids and/or remdesivir or at least limited the potential benefit to only a specific group of patients and obviously you've not considered this point when you've designed your research to be investigated.

### Author's response:

Thank you for looking at the important point regarding steroid and remdesivir administration. We redid our statistics as suggested but our results were similar to the original results. Although the percentages appear identical , while performing the Chi-square analysis, the other variables were different between the steroid group and remdesivir group, resulting in non-significant results amongst patients with remdesivir exposure but not amongst patients with steroid exposure.

However, your point regarding the line, "We noticed a significantly increased steroid administration rate in the NIMV group compared to the no MV group, possibly due to the greater severity of the disease" is well taken and we have revised it accordingly as ," One possible explanation for this finding could be, possibly due to the greater severity of the disease although there is no clear evidence to demonstrate the same."

### 2:

### Comment 1:

In Table 1, it is suggested that "n (%)" should be added after "Age > 60 yr", and "(%)" could be deleted in the Table title. Other places should be modified accordingly.

### Author's response 1 :

Thank you for the valuable suggestion. All the tables have been revised accordingly.

### Comment 2:

In Table 2, "mg/L" should be added after "CRP level"? "ng/ml" should be added after "Ferritin level"? Other places should be modified accordingly.

# Author's response 2 :

I have made the appropriate revisions in the table.

### Comment 3:

In Table 6, all the specificities are 50%? Please check them.

#### Author's response 3 :

Thank you for pointing it out. We revised the stats for the AUC and corrected the specificities.