

Reviewer 1 v.1

Comments to the Author

Here are a few questions and suggestions I have for this paper:

Major comments:

- 1.The article does not provide any discussion of the chest x-ray or CT scan of chest in MV COVID-19 patients and Non-MV COVID-19 patients. Is there any relevant information on these tests or any reason why they are not included?
2. The article does not provide any discussion of the arterial blood gas or Alveolar–arterial gradient in MV COVID-19 patients and Non-MV COVID-19 patients. Is there any relevant information on these or any reason why they are not included?

Minor comments:

- 1.Why do mechanical ventilation COVID-19 patients manifested more chest tightness?
- 2.As some studies have shown, lymphopenia is a signature of severe COVID-19. Lymphocyte count is critically lower in MV patients compare to non-MV ones, representing a more severe infectious condition. Why do univariate analysis of Lymphocyte count $<1.1 \times 10^9$ cells/L revealed  $P=0.065$  in this study?
- 3.No data shown in Neutrophil count $>6.3 \times 10^9$ cells/L was higher in MV patients relative to non-MV. Why is Neutrophil count $>6.3 \times 10^9$ cells/L an early predictor for mechanical ventilation in COVID-19 patients?
- 4.The age between MV group and non-MV group has no significant different in this study. Why add age  $> 60$  yr to univariate analysis?
- 5.The comorbidity between MV group and non-MV group has no significant different in this study. Why add diabetes mellitus and hypertension to univariate analysis?
- 6.Other antibiotics were used significantly more frequently in MV-group patients than those who didn't need mechanical ventilation (100% vs. 50.67%,  $P<0.001$ ). Why is it not included in univariate analysis? Is it an influent factor?
- 7.In MV group, patients received more glucocorticoid therapy (80% vs 20.67%,  $P<0.001$ ). Why is it not included in univariate analysis? Is it an influent factor?
- 8.In MV group, patients received less abidol (75% vs 92%,  $P=0.017$ ). Why is it not included in univariate analysis? Is it an influent factor?
- 9.Why are ALB, GLB, ALT, AST, PCT, D-dimer not included in univariate analysis?
10. You can utilize multivariate stepwise logistic regression models to assess the early predictors for mechanical ventilation in COVID-19 patients.