April 4, 2022

Jerzy Tadeusz Chudek

Editor-in-Chief

World Journal of Clinical Cases

Dear Editor:

We/I wish to re-submit the manuscript titled "Extracorporeal membrane oxygenation for lung cancer-related life-threatening hypoxia: A case report." The manuscript ID is 75866.

We thank you and the reviewers for your thoughtful suggestions and insights. The manuscript has benefited from these insightful suggestions. I look forward to working with you and the reviewers to move this manuscript closer to publication in the World Journal of Clinical Cases.

The manuscript has been rechecked and the necessary changes have been made in accordance with the reviewers' suggestions. The responses to all comments have been prepared and attached herewith/given below.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,

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We sincerely appreciate the careful review of our manuscript and the helpful suggestions provided. The manuscript has been revised as suggested, and detailed responses to the individual comments have been enclosed.

### Reviewer #1:

Frist, ECMO is a new bridge therapy for respiratory failure due to ARDS in patients with central airway obstruction secondary to lung cancer. But it is difficult to carry out because the cost is too expensive in hospitals. Second, Shinsuke Kitazawa et al, reported a case of the similar therapy in 2020, that is, a patient with malignant airway obstruction treated by stent implantation and targeted therapy after using ECMO. Therefore, the manuscript do not cite appropriately the latest and important references in the introduction and discussion sections. Third, lots of clinical research will be necessary to determine the appropriate indications for ECMO.

## Responses

- 1. ECMO is expensive, and it is also expensive in South Korea. Nevertheless, it can be used as a bridge therapy in selected patients. It was successful in our case.
- 2. As per your advice, the paper has been cited and added to the reference list. In our case, cytotoxic chemotherapy was performed after ECMO application, and chemotherapy alone was effective for recovery from respiratory failure and showed good treatment outcomes with definitive CCRT without stent insertion. Kitazawa et al. also applied ECMO in respiratory failure caused by lung cancer and reported successful treatment outcomes with stent and ALK inhibitors. In both cases, in patients with respiratory failure due to NSCLC, ECMO shows that it could be a treatment option in selective cases and not in all patients.
- 3. As per your advice, We have added "Numerous clinical studies will be necessary to determine the appropriate indications for ECMO" to the study limitation in the discussion section

## **Reviewer #2:**

The present study mainly reveals ECMO is a potential bridge therapy for respiratory failure in patients with central airway obstruction secondary to lung cancer. However, I think that there are always only isolated cases, and I do not exclude that there are other etiologies of the patients themselves, I do not think it is widespread, and I suggest that we can try to have some more cases to support this study.

#### Responses

1. We agree with your comment. However, ECMO is so expensive that getting many cases who had undergone the therapy might be difficult. Recently, Kitazawa et al. also reported that ECMO treatment could be a successful bridge therapy in respiratory

failure caused by NSCLC. Both cases show that ECMO may be a treatment option in selected patients. Lots of clinical research will be necessary to determine the appropriate indications for ECMO (We have added the above to the discussion as a study limitation)

2. The manuscript has been carefully reviewed by an experienced science editor whose first language is English and specializes in editing papers written by scientists whose native language is not English. We did some minor revisions to the manuscript to improve the language and readability.

## Reviewer #3:

This case gives us a new revelation: if conditions permit, ECMO can be used as a method for patients to temporarily survive in emergency situations, so as to gain a chance for further treatment.

# Response

1. Thank you for the kind comments.