Dear Editors and Reviewers:

Thank you for your letter and for the reviewer's comments concerning our manuscript entitled "Clinical Outcomes of AngioJet Pharmacomechanical Thrombectomy versus Catheter-Directed Thrombolysis for the Treatment of Filter-Related Caval Thrombosis" (ID: 81228). All the comments are valuable and have been very helpful for revising and improving our paper, as they have played an important role in further guiding our research. We have revised our manuscript and have provided supplementary data to clarify our results. In this revised version, the changes we made are highlighted in blue throughout the document. The main corrections in the paper and the responses to the reviewer's comments are as follows:

Responds to the reviewer's comments:

1.Response to comment(reviewer #1): **Dear authors, Thank you very much for your substantial efforts to improve the article. I have a few suggestions though: 1) Your sample size calculation is mathematically correct, but not methodologically. You mention the article "Zhu J, et al. A case-controlled study on AngioJet rheolytic thrombectomy and catheter-directed thrombolysis in the treatment of acute lower extremity deep venous thrombosis. Vascular. 2020;28(2):177-182", but what kind of study is that?! Do you know the statistical power in that article? Can that study be used to**

calculate a sample size in your study? Statistically speaking the article looks very immature. Please, upgrade the level of your methodological approach. 2) You did not underline the clinical value and novelty of the article. 3) All your remarks for the peers must be incorporated in the article. Those answers are for a reader, not for a peer.

Response:

1)Thank you for highlighting this limitation. We are grateful for the suggestion.We have upgraded our methodological approach under the guidance of a professional statistician in the revised manuscript.It is a retrospective case series analysis from the real world. We conducted the retrospective study that turned out to be very interesting and meaningful. As you said,the article is sufficiently novel and very interesting to warrant publication.Therefore, we compared ART with CDT in patients with filter-related thrombosis on treatment outcomes for providing a basis for the subsequent prospective randomized controlled trial. Once again, we sincerely appreciate the reviewer’s suggestion.

2) We have added some content to underline the clinical value and novelty of the article (the last paragraph of the Introduction and Discussion section).

3)All our remarks for the peers have incorporated in the revised manuscript.Once again, thank you very much for your comments and suggestions.

2.Response to comment(reviewer #2): Thank you for your submission. Your manuscript was an interesting read. The manuscript is very well organized and follows a clear flow. There are only a series of writing errors, English language errors in the text that should be corrected. It is much better to understand if this amount of data is presented in the form of graphs. The figures presented in this draft are not very expressive and clear. It is necessary to provide images with more features. The use of schematic figures is necessary to compare these two types of methods.

Response: Thank you for your suggestion. However, we have solicited our friend, a native English speaker from the USA, to help us polish our article. We have provided images and graphs with more features and have used schematic figures to compare the two types of methods. These changes do not influence the content and framework of the paper. Here, we did not list the changes but marked them in red in the revised paper. We hope the revised manuscript is now acceptable.

2. Response to comment (reviewer #2)

1. **Response to comment: (Would you please kindly correct all your typos and grammar errors throughout the manuscript?)**

Response: Thank you for your suggestion. We appreciate the reviewer's positive evaluation of our work. We have tried our best to polish the language in the revised manuscript. Our manuscript was edited for proper English language, grammar, punctuation, spelling, and overall style by the highly qualified native English-speaking editors at AJE. We hope the revised manuscript is now acceptable.

2. **Response to comment: (Please provide the reader with the relevant information about statistical power including sample size calculation. The point is if you deliver the results of the retrospective study, it must be justified in the Introduction and supported by a strong statistical approach. Please underline the value of your study)**

3) **Response:** We appreciate your favorable consideration and the reviewer's insightful comments. These comments have been very helpful, thus the manuscript has been revised accordingly. We have upgraded our methodological approach under the guidance of a professional statistician in the revised manuscript.It is a retrospective case series analysis form the real world, we conducted the retrospective observational study that turned out to be very interesting and meaningful. Therefore, we compared ART with CDT in patients with filter-related thrombosis on treatment outcomes for providing a basis for the subsequent prospective randomized controlled trial. We have added some content to underline the clinical value and novelty of the article (the last paragraph of the

Discussion section).Thank you for highlighting this limitation. We are grateful for the suggestion.We hope that the revisions are now acceptable.

3. **Response to comment:(Regarding "There was no symptomatic PE after the treatment in either group", how long your follow-up was? Are you talking about the outcome at discharge? Did any patients have CT-angiopulmonography after the intervention? Did you analyze outcomes through the months? Did you test D-dimer in these patients, including follow-up?)**

Response: We sincerely appreciate the valuable comments. Thank you for your suggestion. We performed CT-angiopulmonography before and within 3 days after the intervention. We discussed the outcome of PE at discharge. The median follow-up time was 4 (1,10) months after discharge. These patients had no symptoms of pulmonary embolism during follow-up, so we did not routinely perform CT-angiopulmonography in the outpatient clinic.Therefore, we did not analyze the outcomes of pulmonary embolism during the follow-up period.We tested the D-dimer levels of these patients before and after the intervention. Patients were seen in the outpatient clinic and were followed up by deep vein Doppler ultrasound of the lower extremity at three months, six months, and 12 months after discharge. In addition, patients also underwent routine D-dimer testing every month after discharge. We have carefully checked the manuscript and have added some content on

the D-test and PE to the revised manuscript. Once again, thank you very much for your comments and suggestions.

4. **Response to comment:(Table 1 becomes confusing especially when in the text you are mentioning the absence of symptomatic PE. There must be some elaboration on pulmonary embolism in 12 patients. Maybe it might be nice to make a sort of subanalysis in that subset merely because this is the most critical part of the story.)**

Response: We think that is an excellent suggestion. Thank you. In our study, all the patients underwent CT-angiopulmonography before and after the intervention. The pulmonary embolism was located at the level of the segmental or lobar arteries in 12 patients. CT angiography did not reveal pulmonary embolism after the intervention in these patients. A new pulmonary embolism was located at the level of the segmental arteries after the intervention in 6 patients. No symptomatic PE occurred before or after the intervention in either group. We elaborated pulmonary embolism in our results in the revised manuscript. Due to the small sample size, we did not perform any sort of subanalysis. In future studies, as the sample size increases, we will further analyze this part in detail. Once again, we deeply appreciate the reviewer's suggestion.

5. Response to comment:(The definitions of your clinical conditions must be provided for the reader. Please elaborate on the description of your interventional technique in the sense of reproducibility.

Many details are missing especially those that can be critical for technical success and outcomes.)

Response: We deeply appreciate the reviewer's suggestion. According to the reviewer's comment, we have provided more details to describe the clinical conditions and interventional technique in terms of reproducibility. We have added the required information as explained above (**METHODS**). Special thanks to you for your good comments.

6. Response to comment:(Regarding bias, please elaborate on the topic in the limitations. Mentioned limitations without any remarks are unacceptable. There must be a vision or the author's position. Please generally underline the clinical value of your findings and the obstacles that you faced. Why could you not run the prospective observational study)

Response: Thank you for highlighting this limitation. We are grateful for the suggestion. This section of bias was revised and modified according to the information shown in the work, as suggested by the reviewer (the last paragraph of the Discussion section). We have added some content on the clinical value of our findings and the obstacles to drawing the conclusion. As the reviewers said, we conducted the retrospective study that turned out to be very interesting and meaningful. However, prospective randomized controlled trials are more convincing. Therefore, we compared ART with CDT in patients with filter-related thrombosis on

treatment outcomes for providing a basis for the subsequent prospective randomized controlled trial. Once again, we sincerely appreciate the reviewer's suggestion.

Thank you very much for your comments and suggestions.

Sincerely,

Xuan Tian