Response letter

Reviewer #1:

ABSTRACT The abstract is too long, the author may reduce the paragraph on the methods as well as the results. Emphasizing the most important information is recommended

Response: We thank the reviewer for the kind comments. The abstract was substantially shortened according to your kind reminding.

INTRODUCTION AND DISCUSSION There are some typo of the citation on some paragraphs

Response: We thank the reviewer for the kind reminding, and we are sorry for the mistake. The typo of references was corrected throughout the manuscript.

FIGURES Please add the “arrow” to help describing the images regarding to information on the legend

Response: We thank the reviewer for the kind reminding, the arrows were added in the figures and illustrated in the figure legends.

METHODS How did the observer put the ROI in the tumor parenchym? Where the ROI should be put in each tumor parenchym with the larger tumor size which had the more heterogenus density (in the solid or necrotic component? How many ROI is put in the each tumor parenchym? It must be clearly mentioned on the methods section since the size with heterogenity may influence the results of quantitative values of CT perfusion

Response: We thank the reviewer for the comments. ROIs were positioned on the highest intensity projection of tumor parenchyma to avoid selecting the vascular or the necrotic areas. For large heterogeneous tumors, the average value of three ROIs in the tumor parenchyma was used. These were added in the *Methods* section.

RESULTS How is the range of tumor size of this study. It’s better to describe it on the

results

Response: The reviewer raised a good question. Due to the study limitation, we failed to collect the tumor size and listed as a study limitation.

Reviewer #2:

Comments to Authors: Authors investigated the value of computer tomography (CT) perfusion imaging in the evaluation of angiogenesis in pancreatic adenocarcinoma patients. Generally, it is an interesting study, however there are some comments and questions the authors should address, all were detailed below.

Response: We thank the reviewer for the overall positive and encouraging comments. The manuscript was modified and improved according to the comments.

Major concerns

• What was the value of including healthy control in this study?

Response: We thank the reviewer for this comment. Relative CT perfusion parameters in control group was listed in Table 1. In addition, the images for healthy control were added, please refer to the new Figure 1.

• Specify exposure and the outcome in your study?

Response: We thank the reviewer for this comment. This study is a prospective observational study, and we did not specify the exposure and outcome in the present study.

Minor corrections:

To better understand the correlation between relative CT perfusion parameters and AR it should be presented as a figure

Response: We thank the reviewer for this comment. The correlation between CT perfusion parameters and AR was supplemented as Figure 4A-B.

Reviewer #3:

* The abstract is too long. Many data in the method and result section of the abstract could be transferred to the main text.

Response: We thank the reviewer for the kind comments. The abstract was substantially shortened according to your kind reminding.

* The authors have included healthy individuals, yet no images are communicated regarding their CT scans. Nor patients were correctly compared to healthy individuals.

Response: We thank the reviewer for the comments. Relative CT perfusion parameters in control group was listed in Table 1. In addition, the images for healthy volunteers were supplemented, please refer to the new Figure 1.

* The choices of VEGF, CD105, and CD34 are not clear and not optimal. The authors should have checked CD31, CD144, KDR, and VEGF for better conclusions in angiogenesis.

Response: The reviewer raised a good question. In the preliminary findings, the staining results of CD31 were similar to that of the CD34. Due to funding limitation, we selected CD34, CD105 and VEGF for further analysis.

* The imaging data should have been compared to some in vitro experiments. In general, this study is yet superficial and must be significantly developed.

Response: We thank the reviewer for this comment. We agree with the reviewer that the imaging data should be compared with additional *in vitro* experiments, yet due to funding limitation, these experiments were not performed. In spite of this, the present findings could, at least in part, prove that perfusion CT imaging may be an appropriate technique for quantitative assessments pancreatic of the adenocarcinoma microvasculature.

EDITORIAL OFFICE’S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) Science editor:

The investigators examined use of computer tomography (CT) perfusion imaging for evaluation of angiogenesis in pancreatic adenocarcinoma. The study included 35 pancreatic adenocarcinoma patients and 33 healthy controls. They examined relative blood flow, relative blood volume, and relative peak enhancement comparing cases to controls, and found that these angiogenic measures are lower in pancreatic cancer patients than controls. However, relative permeability was higher in pancreatic adenocarcinoma patients than controls. They concluded that perfusion CT imaging may be an appropriate approach for quantitative assessment of tumor angiogenesis in pancreatic adenocarcinoma. Major concerns of the study include (1) the appropriateness of healthy controls, patients with chronic pancreatitis would have been a more appropriate control group; (2) lack of clear rationale for the assessment of angiogenesis as the end endpoint, (3) inadequate description of study methods. Minor: The abstract is too long.

Response: We thank the editor for the comments. Relative CT perfusion parameters in control group was listed in Table 1. In addition, the images for healthy control were added, please refer to the new Figure 1. Pancreatic cancer is one of the most malignant tumors of the digestive system. The angiogenesis of pancreatic cancer is the pathological basis that promotes the growth and metastasis, and is closely related to the malignancy and prognosis. Therefore *in vivo* evaluation of pancreatic cancer tumor angiogenesis is of great significance for the prognosis evaluation of patients. The description of the methods was re-checked and modified, and the abstract was substantially shortened.

(2) Company editor-in-chief:

I recommend the manuscript to be published in the World Journal of Clinical Cases. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please 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. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

Response: We thank the editor-in-chief for the encouraging and positive comments. The figures were organized to a single PowerPoint file, and all tables were presented in a standard three-line form.