

September 19th, 2023.

To,

Editor-in-Chief,

World Journal of Radiology

**Subject:** Submission of Revised Manuscript: 87794.

Respected,

We, the authors, like to thank you for giving us the opportunity to submit the revisions for our manuscript. Below is the point-to-point correction in the revised manuscript.

We hope you consider our work for publication.

Thank you.

Corresponding author.

**Reviewer 1:**

1) Lack of key words.

**Reply:** Thank you for your comment. We have included the following keywords: radiomics, pancreas, cancer, survival, segmentation.

2) More details are needed on the specific radiomic features extracted and software settings used for feature extraction. A supplementary table listing all features would be helpful.

**Reply:** Thank you for your comment. We have added a table listing all the features.

Table 1. Radiomic Features extracted from Segmentation Programs	
MIM Software Inc (3D Segmentation)	Cambridge Computed Imaging LTD (2D Segmentation)
Integral total value	Entropy
Kurtosis	kurtosis
Maximum HU	mean HU
Mean HU	mean positive pixels

Maximum mean HU ratio	skewness
Median HU	standard deviation
Median Minimum HU ratio	
Minimum HU	
Minimum mean HU ratio	
Skewness	
Sphere value	
Standard deviation	
Standard deviation mean HU ratio	
Total HU	
Volume	
Voxel count	
Entropy	

We have added the features Software Details:

Segmentation Software:

- 3D Segmentation: Used MIM software version 6.9.4. Segmentation was performed on the portal venous phase, and tumors were contoured on axial, coronal, and sagittal planes.
- 2D Segmentation: Used TexRad Research version 3.9. Segmentation was performed on images from the portal venous phase using the polygon region of interest tool. The slice with the greatest tumor diameter was used.

Feature Extraction:

- MIM Software: Extracted 17 texture features, all belonging to first-order statistics. Some of the features mentioned are kurtosis, skewness, entropy, mean HU, etc.
- TexRad Software: Extracted 6 texture features, including entropy, kurtosis, mean HU, mean positive pixels, skewness, and standard deviation.

Note on Filters:

- Only values without the application of a spatial scale filter were considered, given that TexRad applies spatial scale filters, and MIM does not. This was done for comparison purposes.

3) Suggest changing "viability" to "residual tumor" when referring to post-treatment assessment.

**Reply:** Thank you for your comment. We have reviewed the manuscript and changed "viability" to "residual tumor."

4) The authors state they evaluated the relationship between tumor volume and percent viability following treatment, but the specific results are not presented in the abstract. This data should be shown or the mention of treatment response deleted.

**Reply:** Thank you for your comment. We have added it to the edited abstract.

Models determined that patients with increased tumor size greater than 1.35 cm were likely to have a higher percentage of residual tumor of over 10%.

5) The methods for assessing tumor viability post-treatment should be detailed - how was this quantified on imaging? What criteria or thresholds were used to categorize viable vs nonviable tumor?

**Reply:** Thank you for your comment. We have added the details in the edited manuscript. Tumor responses were based on a comparative evaluation of pre-and post-treatment scans and were evaluated by the Response Evaluation Criteria in Solid Tumors (RECIST) criteria.

6) Assess interreader variability in judging viability. Was there independent review by multiple radiologists? What was the concordance?

**Reply:** Thank you for your comment.

In the study, we did not perform an interreader variability assessment. The tumor viability judgments came from a single radiologist. While this simplifies interpretation, we agree it may not account for potential variability in readings. Although interreader variability can strengthen reproducibility, its absence doesn't necessarily weaken the study. It merely necessitates more caution when interpreting and generalizing the results.

Future studies might benefit from including multiple reviewers to add depth and reliability.

### **Revision reviewer**

#### Specific Comments To Authors:

I am satisfied with the detailed responses provided by the authors addressing the concerns raised in my previous review. Based on the revisions made, I recommend this paper be accepted for publication. The study methods are sound and the results are well articulated. Please have the authors ensure all in-text citations match the reference list prior to final acceptance. Otherwise, I have no further questions or comments at this stage.

**Rely:** Thanks for your comments, I had checked all in-text citations match the reference list prior to final acceptance.