

Response to Reviewers:

1. In response to reviewer 1's suggestions, the additional references have been added to the introduction and are highlighted in yellow per the instructions for Resubmission.
2. In response to reviewer 2's suggestions which have also been highlighted in yellow:
 - a. With regard to the suggestion for better explanation for motivation for efficient annotation method, this is added in the 3rd paragraph of the introduction section.
 - b. With regard to the dataset characteristics, the updated information is added in table 1 and an additional subsection in results titled "Comparison of Training and TCIA Datasets"
 - c. Explanation for 2D Unet selection was added into "AI Algorithm" subsection in methods.
 - d. Additional details regarding the training of the model and data augmentation is added into the "AI Algorithm" subsection in methods.
 - e. With regard to the additional score of precision and F1 score, we deeply regret that we are unable to provide these scores due to the change of our inter-institutional agreement which no longer permit the datasharing. However, sensitivity score provided is equivalent to recall.
 - f. With regard to the ensemble technique, additional detail is include in the second paragraph of the "AI Algorithm" subsection.
 - g. Regarding the statistical test for the annotation time, this is added into Table 4 and also the section on '*Time Needed to Adjust AI-Init Segmentation*' which is renamed to '*Time Needed to Adjust AI-Init Segmentation and to Complete Skip-Slide Annotation*'.
 - h. Regarding the limitations of the study, the small dataset size and the lack of full model metric is added in the discussion section.
 - i. Additional discussions have been included in the discussion section regarding the significance and implication of the findings on equivalence of skip-slice annotation with that of fully annotated cases.