Peer Review File

The manuscript entitled "Predictive value of apparent diffusion coefficient for neoadjuvant chemotherapy in locally advanced colorectal cancer patients" evaluated about ADC as a predictor of the efficacy of neoadjuvant chemotherapy in locally advanced CRC patients. The topic seems interesting. However, there are some problems in this study.

#1 In line 80, you state that there are negative studies on CEA, please cite some references.
Reply 1: We have revised the sentence accordingly. See page 3, line 85-88.

#2 In line 87, you state that the higher the density of tumor cells, the higher malignancy it will be and the more likely they are to metastasize, but is this self-evident? Shouldn't you add a citation? For example, mucinous carcinoma has a high liquid component and low cell density, but it is one of a worse prognostic adenocarcinoma compared to highly differentiated adenocarcinoma.
Reply 2: We have add a citation. See ref 13.

#3 In line 160, you mentioned that ADC was significantly increased, does this mean that the pre-treatment ADC value was predominantly higher in objective response group? Or does this mean that the ADC values significantly increased as a treatment effect?
Reply 3: This mean that the pre-treatment ADC value was predominantly higher in objective response group. We have revised the sentence to avoid mistake. See page 5, line 163-169.

#4 In table 2. Tumor diameter was also mentioned, it is better correct the title.
Reply 4: We have revised it. See page 14, line 388.

#5 There is no explanation of the MR imaging technique (which machine was used, who evaluated it, etc.) or how the ADC was calculated.
Reply 5: We have added accordingly. See page 5, line 148-151.

#6 As efficacy evaluation of treatment, RECIST was mentioned to be used, was it MRI or CT that measured tumor diameter? It would be better to describe the specific method. And the objective efficacy group is probably the sum of the PR and CR groups, but I think it would be better to clarify the description.
Reply 6: We have added it. See page 4-5, line 131-140.

#7 There is no explanation of pathological findings after neoadjuvant chemotherapy, how did you assess the efficacy of therapy?
Reply 7: We have added it. See page 4-5, line 131-140.

#8 Lane 86-88: Apparent diffusion coefficient (ADC) is an index in dynamic enhanced magnetic resonance imaging (MRI), reflecting the density of tumor cells.
Reply 8: See reply 2.

#9 Lane 88-89: The lower its level, the greater the density of tumor cells, and the higher the degree of malignancy will be, so the tumors become more likely to metastasize.
Reply 9: See reply 2.

Reviewer B

In the article entitled 'Predictive value of apparent diffusion coefficient for neoadjuvant chemotherapy in locally advanced colorectal cancer patients' the authors compared selected clinical and radiological characteristics between two groups of colorectal cancer patients: objective response and non-response group. The authors underlined the significant difference in ADC values between these two groups.
The measurement of ADC value and its role as prognostic factor have been investigated last years, but it is still an interesting and relevant topic. The topic of the article is significant for medical practice. Research design is appropriate and results are clearly presented.
The text is clear and easy to read. English language are fine, but some style editing and spell check is required.
Reply 1: Thanks for your comments.

Some improvements are necessary to make this article complete and adequate for publication:

Can you please provide details about the method of measurements of ADC value? It was whole-tumor volume analysis or measurement of single slice? Can you provide details about MRI parameters and DWI imaging b values? What plane was used to measure the ADC? Without these information, study is impossible to reproduce.
Reply 2: We have added. See page 5, line 150-154.

Lines 86 – 87: ADC is not an index in dynamic enhanced MRI; diffusion-weighted imaging do not require contrast agent. It is part of multiparametric MRI, definition should be changed.
Reply 3: We have deleted it. See page 3, line 90.

Lines 170, 182: What method did you use to establish the best diagnostic threshold?

Reply 3: The value of the point closest to the upper left of the ROC curve was the best diagnostic threshold. We have added in the methods. See page 5, line 164-165.

Line 188 … second to breast cancer and lung cancer… - language correction is needed.
Reply 4: We have revised. See line 6, line 199-200.

Line 249 ADC is not an index in dynamic enhanced MRI.
Reply 5: We have revised. See page 8, line 263-265.