

Format for ANSWERING REVIEWERS

October 15, 2021

Dear Editor,



Title: The role of carbon nanotracers in lymph node dissection of advanced gastric cancer and the selection of preoperative labeling time

Author: Kai Zhao, Bao-Qiang Shan, Yan-Peng Gao, Jia-You Xu

Name of Journal: *World Journal of Clinical Cases*

ESPS Manuscript NO: 70470

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

The first review's composition comment on the manuscript and my answer

- (1) Conclusions should be mentioned at the end of the manuscript, not only in abstract.

Answer: Yes, and we have added conclusions at the end of the manuscript.

- (2) In the discussion section, the authors should mention the strengths and limits of the study.

Answer: Yes, the strengths and limits of the study have already been added in the discussion section.

- (3) In the discussion section, authors should mention postoperative complications after gastric surgery, including anastomotic leakage (cite Radulescu D, Baleanu VD, Padureanu V, Radulescu PM, Bordu S, Patrascu S, Socea B, Bacalbasa N, Surlin MV, Georgescu I, Georgescu EF. Neutrophil/Lymphocyte Ratio as Predictor of Anastomotic Leak after Gastric Cancer Surgery. *Diagnostics* (Basel). 2020 Oct 9;10(10):799. doi: 10.3390/diagnostics10100799).

Answer: Yes, and postoperative complications have already been added in both in discussion and Table 3.

The editorial office's comments on the manuscript and my answer

- (1) The authors have performed a trial comparing the use of preoperative nanoparticle labelling and those without nanomarkers to identify lymph nodes requiring dissection during subtotal or total gastrectomy for gastric cancer. They found that individuals who had nanoparticle labelling had a greater number of lymph nodes dissected and the number of stained nodes were greater when

the labelling occurred a day prior to the gastrectomy rather than on the day of the procedure. It is very difficult to determine the study design based upon the details provided. It is initially said that this is a retrospective study but in the methods it is described that people are randomised to nanoparticle labelling. Please clarify which methodology was used. If a randomised design was used then follow the CONSORT 2010 guidelines and provide details on how the statistical power was calculated including any blinding processes.

Answer: it has been modified in the manuscript, the study began in May 2018 using prospective analysis according to CONSORT 2010 guidelines, In this RCTs, grouping is randomized according to the number generated by the computer; No restriction, intervention or adjustment prior to or in the course of implementation, Doctors and patients cannot know or decide in advance which treatment group a patient will be assigned to. Neither doctors nor patients can infer from the group a patient has entered which group the next patient will be assigned to, and according to the results, there is a significant difference between experiment and control group in the number of dissected lymph nodes and black-stained nodes.

- (2) Please describe what processes the controls went under to identify relevant lymph nodes. Also please clarify how selection of the day to inject nanoparticles was made.

Answer: After the specimen was isolated, the senior attending doctors placed it according to its anatomical position and took photographs. The lymph nodes in each group around the stomach were cut and marked according to the blood vessels. The tissues in each group were finely separated and the surface tissues of lymph nodes were removed, and bagged separately. All lymph nodes were sent to the pathology department for postoperative analysis according to their corresponding perigastric lymph node groups. For example: the patients with total gastrectomy, the gastric peripheral lymph nodes on the lower cardia side were classified as No. 1, the gastric peripheral lymph nodes on the greater cardia side were classified as No. 2, and the peripheral tissues of short gastric vessels above the left arteriovenous Hemlok clip were classified as No. 4sa. The left arteriovenous clipped tissue along the gastric omentum was classified as No. 4sb, the right arteriovenous clipped tissue along the gastric omentum was classified as No. 4d, and the subpyloric region was classified as No. 6. Ligation of the right

gastric arteriovenous Hemlok clipped to the upper part of the pylorus was classified as No. 5, from the ligation of the left gastric arteriovenous Hemlok clipped to its first branch was classified as No. 7, and the remaining perigastric tissue near the lesser curvature was classified as No. 3. And the preoperative labeling time is also chose according to the method of simple randomization.

- (3) An ethics statement is required for the study.

Answer: ethics statement is approved by Weifang People's Hospital.

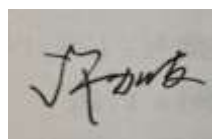
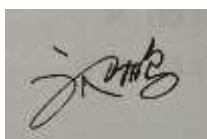
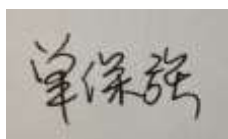
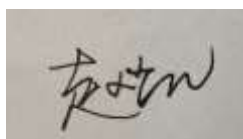
- (4) The title of the article suggests that stage advanced gastric cancers were assessed while the inclusion criteria suggests stage I-III gastric cancers were included. Please clarify this and whether it was the TNM staging used. Please clarify whether the labelling made any difference to clinical outcomes.

Answer: Postoperative pathology reports of some cases showed that the tumors only invaded the submucosa without penetrating the serous layer, and lymph node metastasis was less. According to TNM staging, these cases could be divided into stage I. In order to prevent misunderstanding, the Inclusion criteria in this paper have already modified to patients with advanced gastric cancer. Preoperative submucosal labeling are helpful to distinguish normal tissues from lymphatic tissues and increase the number of dissected lymph nodes, which is also the work of this study, so as to improve postoperative pathological staging.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Clinical Cases*

Sincerely yours,



Kai Zhao, Master of Medical Science
Department of General Surgery, Weifang People's Hospital, Weifang 261400, Shandong, China,
E-mail: daniel_zdk@163.com

Bao-Qiang Shan Master of Medical Science
Department of General Surgery, Weifang People's Hospital, Weifang 261400, Shandong, China,
E-mail: 1142570722@qq.com

Yan-Peng Gao, Master of Medical Science

Department of General Surgery, Weifang People's Hospital, Weifang
261400, Shandong, China
E-mail: 17675375@qq.com

Jia-You Xu, MD, Chief Doctor
Department of General Surgery, Weifang People's Hospital, Weifang 261400, Shandong, China,
E-mail: xujiayou5252@sina.com