



## Reply

## Reply letter to: "Lymph node harvest in rectal cancer patients with good tumor regression grade following neoadjuvant chemoradiotherapy"



## ARTICLE INFO

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Rectal cancer

Lymph nodes

Pathological complete response

## To the Editor

We have received the thoughtful comments on our previously published article [1] in International Journal of Surgery, and we would like to respond to their valuable comments.

Firstly, we would like to thank the authors for recognizing our attempt to adjust for potential confounders, by means of using strict inclusion and exclusion criteria in our study. We do also agree that good quality of mesorectal excision and lymph node (LN) retrieval are the most important factors for good oncologic outcomes. Therefore, we do agree that suboptimal surgery should not be compensated by Neoadjuvant treatment.

We understand their concern regarding our statement "retrieval of < 12 LNs is not worrisome, and should not be used as a surrogate for oncological adequacy". Their concern is valuable and we would like to emphasize once more that our paper is focused specifically on patients with good tumor regression grade (TRG) with pathological complete response (TONO), and less than 12 lymph nodes in the specimen report. Sometimes this group of patients were classified as Nx and they mostly go to adjuvant therapy.

When we made that statement, we were presumably referring to node-negative patients, since we were referring to patients with pathologic complete response. We made that clear in all parts of our study. We are totally in agreement that lower LN harvest in patients with node-positive carries a higher risk for less favorable prognostic outcomes.

With respect to the data on metastatic LN ratio, unfortunately we have not provided that in our study. We understand that this would be worthy for patients with node-positive disease. However, we would like to emphasize that this would be meaningless in our study, since our purpose was to evaluate the factors associated with less than 12 LN harvested. We did not aim to evaluate the prognostic factors of patients with or without LN involvement. Also, the objective of our paper was not to report data on the long-term outcomes, this is our next work and it will be released later this year.

The best Tumor Regression Grade was Pathological Complete Response (TONO) in patients in which the retrieval of 12 LNs is not worrisome, and should not be used as a surrogate for oncological adequacy.

Though the number of harvested LN varies across individuals and is

influenced by several factors, we made a literature review in order to identify factors that could potentially affect the number of LN retrieved in specimens of patients with rectal cancer treated by CRT followed by TME [2].

We agree that proper surgical technique and pathologic investigation of the specimen should be imperative in all cases.

After preoperative CRT, the number of LN retrieved also is decreased from the therapeutic effect of radiation, resulting in sterilization of cancer cells and/or fibrosis in the LN, but not for any surgical or pathological error. Then the reduced number of examined LN is caused by the therapeutic effect of preoperative CRT, and there would be no effect on patient's survival.

However, in particular cases when less than 12 LN are retrieved in the setting of a good TRG, this could be considered non-worrisome. In fact, others recent studies have shown that the retrieval of fewer than 12 lymph nodes in surgical specimen of rectal cancer in patients who had received preoperative CRT and with a good TRG, was a good indicator of tumor response with better local disease control, and a good prognostic factor [3–7].

We thank you for the interest in our paper and the additional insights on our previously published articles and we agree that further studies are needed.

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No.

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**Author contribution**

Review and response.

**Research registration number**

No.

**Guarantor**

Leonardo A. Bustamante-Lopez.

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