

Article information: <https://dx.doi.org/10.21037/gs-23-376>

**Reviewer A**

**Comment 1:**

This paper is scientifically important and may help clinicians for the management of patients with DTC.

Nevertheless, I was surprised to notice that the value of serum Thyroglobulin was not taken into consideration.

I recently saw an interesting manuscript (Cancers. 2023 May 30;15(11):2976. doi: 10.3390/cancers151129769), that showed important role of Tg in predicting node metastasis. Several other papers confirmed the role of Tg.

Authors should mention these papers and discuss the reason for not considering Tg as a possible predicting factor.

**Reply 1:**

We are very sorry for our negligence of the importance of serum thyroglobulin. We reviewed the research data and conducted statistical analysis on the preoperative serum thyroglobulin (Tg) of enrolled patients. We found that there was no statistical difference in serum Tg between skip-positive group and skip-negative group. Some studies showed the important role of serum Tg in predicting node metastasis while the others showed that there was weak correlation between Tg and metastatic disease. we supplemented the results and relevant literatures in the abstract and main text. We also cited the manuscript mentioned by Reviewer A in the discussion section. In the future study, we will use large sample to investigate the role of serum Tg in predicting lymph node metastasis.

**Changes in the text:**

We added the data, discussion and reference of preoperative serum Tg in our study. (see Page 2, line 39-40; Page 8, line 164; Page 12, line 258-263; Page 15, line 312; Page 21, line

Special thanks to you for your good comments.

### **Reviewer B**

#### **Comment 1:**

Abstract:

- The objective section is not properly structured. Please make it more organized in three short statements. First statement explains what is already known about problem burden of skip metastases in PTC, second statement explains what is lacking in the literature and third statement explaining what the aim of your study.

#### **Reply 1:**

We have re-written this part according to the Reviewer's suggestion.

#### **Changes in the text:**

We revised the first paragraph of Abstract, "Papillary thyroid carcinoma (PTC) is the most common endocrine malignancy. Skip metastases of PTCs are easily misdiagnosed before surgery, and it could lead to re-operation and affect the prognosis. Although there are a few studies about nomograms for predicting central lymph node metastases (CLNM) or lateral lymph node metastases (LLNM) of PTCs, there are few studies about nomograms for skip metastases." (see Page 1, line 15-21)

#### **Comment 2:**

Background:

- In the background, the author provided information about the incidence of lymph node metastasis in PTC, however there is no information about the incidence of skip metastasis.

#### **Reply 2:**

We are very sorry for our negligence of the information about the incidence of skip metastasis.

**Changes in the text:**

We added the information about the incidence of lymph node metastasis in PTC in the first paragraph, “the incidence of skip metastases is 6.5%-27.5% (5)”. (see Page 3, line 61-62)

**Comment 3:**

Background:

- Explain the disease burden of skip metastasis and how it will affect the workup, surgical planning and disease prognosis.

**Reply 3:**

We have re-written this part according to the Reviewer’s suggestion.

**Changes in the text:**

we revised our text as advised and added some explanations, “ When intraoperative pathology indicates negative of CLN, further LLND will not be performed unless preoperative ultrasound and fine needle aspiration biopsy (FNAB) indicate lateral lymph node metastases(LLNM). However, preoperative assessment of LLNM has a certain false negative rate, and its accuracy largely depends on the experience of pathologists and ultrasound doctors (7). Misdiagnosis of skip metastasis of PTCs before surgery will mean insufficient lymph node dissection during surgery, which could lead to re-operation and affect the prognosis.” (see Page 3-4, line 66-74)

**Comment 4:**

Methods:

- The methods section is well written and organized.

**Reply 4:**

Thank you for the comment of the reviewer.

**Comment 5:**

Results:

- The results section is well written and organized.

**Reply 5:**

Thank you for the comment of the reviewer.

**Comment 6:**

Results:

- Use the statement “The characteristics of our cohort are summarized in Table 1”

Discussion:

**Reply 6:**

Thank you for the comment of the reviewer. we have revised our text and used the statement “The characteristics of our cohort are summarized in Table 1”

**Changes in the text:**

We added the statement “The characteristics of our cohort are summarized in Table 1” in the first paragraph of Results. (see Page 8, line 156)

**Comment 7:**

Discussion:

- Please provide reference for the statement that “Skip metastasis is closely associated with local recurrence and prognosis” in the first paragraph.

**Reply 7:**

We are very sorry for our negligence of the reference for the statement that “Skip metastasis is closely associated with local recurrence and prognosis” in the first paragraph.

**Changes in the text:**

We added the reference (Ref. 13) in the first paragraph of Discussion. (see Page 10, line 204; Page 18-19, line 396-398)

**Comment 8:**

Tables and figures:

- The author provided an adequate number of tables which are well structured.

**Reply 8:**

Thank you for the comment of the reviewer.

Special thanks to you for your good comments.