

## Peer Review File

Article information: <http://dx.doi.org/10.21037/gs-20-417>.

### **Reviewer A**

This is a well written review on IgG4 thyroiditis in the Asian population.

**Comment 1:** As IgG4/IgG ratio is also important for the diagnosis of IgG4 related thyroiditis, I recommend to add one more H&E (high power) figure and another figure for immunohistochemical staining of IgG.

**Answer:** According to the reviewer's recommendation, two new figures have been added to the revised manuscript. The previous H&E figure (low power) and the new H&E figure (high power) are grouped together and re-labelled as Figure 1. The previous immunostaining figure of IgG4 and the new figure of IgG are combined and re-labelled as Figure 2. Please see the new Figure 1, Figure 2 and the revised figure legends.

### **Reviewer B**

The authors provide an overview of IgG4 thyroiditis, its research status in the Asian population, and its relationship with systemic IgG4-related disease. The article is very well-written. Some minor comments:

**Comment 1:** Page 6, para 2, lines 3-4: The acronym EULAR should be added after "European League Against Rheumatism"

**Answer:** According to the reviewer's recommendation, the acronym EULAR has been added after "European League Against Rheumatism" in Page 7 (Actually these

words first appears in page 7. We kindly ask the reviewer to confirm the page), para 2, lines 3-4.

**Comment 2: Page 6, para 2, lines 20-21:** “The 2019 ACR/EULAR IgG4-RD classification criteria first include absolute exclusion criteria”: This should be re-worded to “The 2019 ACR/EULAR IgG4-RD classification criteria are one of the first to include absolute exclusion criteria”.

**Answer:** According to the reviewer’s recommendation, the corresponding sentence has been re-worded as “The 2019 ACR/EULAR IgG4-RD classification criteria are one of the first to include absolute exclusion criteria”. Please see the revised manuscript, page 7, para 2, lines 16-18.

**Comment 3: Page 9, para 1, lines 1-3:** “a significant increase in the serum IgG4 level, which demonstrates a marked reduction after surgery, was identified in patients with IgG4 thyroiditis”: This may be re-framed as “a significant increase in the serum IgG4 level, which demonstrated a marked reduction after surgery, was identified in a subset of patients with IgG4 thyroiditis”: Also mentioning the range of serum levels found and that the levels are higher than the proposed cut-offs will help in driving the point home better.

**Answer:** According to the reviewer’s recommendation, the corresponding sentence has been re-framed as “a significant increase in the serum IgG4 level (range 167-459 mg/dl, reference value of serum IgG4: 4.8-105 mg/dl), which demonstrated a marked reduction after surgery (range 25.6-97.8 mg/dl), was identified in a subset of patients with IgG4 thyroiditis”.

**Comment 4: Page 14, para 3:** “Riedel’s thyroiditis (RT) is a sporadic disease with an incidence of 0.06% according to the Mayo Clinic.”: Can we have a reference?

**Answer:** In the original version of our manuscript, the corresponding article “Invasive fibrous thyroiditis (Riedel thyroiditis): the Mayo Clinic experience, 1976-2008” was mistakenly cited as Ref.33 in the next sentence after “Riedel’s thyroiditis (RT) is a sporadic disease with an incidence of 0.06% according to the Mayo Clinic.” It has been moved to the right site in the revised manuscript. Please see page 15, para 3, line 1-2.

**Comment 5: Page 16, para 2, line 16:** Kindly expand CVT.

**Answer:** “CVT” is an acronym stands for “the cut-off value of thyroid-specific diagnostic criteria” for diagnosing IgG4 thyroiditis. According to the reviewer’s suggestion, the corresponding sentence has been revised as “Very recently, our group confirmed that the cut-off value of thyroid-specific diagnostic criteria (CVT: IgG4<sup>+</sup> plasma cells >20/HPF, and IgG4<sup>+</sup>/IgG<sup>+</sup> plasma cell ratio >30%) can precisely define a significant IgG4<sup>+</sup> plasma cell count in IgG4 thyroiditis.” Please see page 17, para 2, line 5-8.

### **Reviewer C**

This review is written by one of researchers who have most energetically investigated IgG4 thyroiditis. The manuscript is very well written and balanced including full related- references. The reviewer has only two minor comments.

**Comment 1:** Hashimoto thyroiditis had better be “Hashimoto’s thyroiditis”.

**Answer:** We agree with the reviewer that “Hashimoto’s thyroiditis” has been used as one of the official names of this disease for a long time. However, according to the most recent version of William’s Textbook of Endocrinology, Rosai and Ackerman’s Surgical Pathology, and WHO Classification of Tumors of Endocrine Organs, “Hashimoto thyroiditis” is used instead of “Hashimoto’s thyroiditis” by most endocrinologists and pathologists. Therefore, all coauthors of this manuscript prefer to keep using “Hashimoto thyroiditis”.

**Comment 2:** “+ (postitive)” had better be “+ (superscript)”.

**Answer:** As suggested by the reviewer, in the revised manuscript, all “+ (postitive)” have been replaced by “+ (superscript)”.