**Response to Editor and Review Comments**

I am very much thankful to the editor sand reviewers for their deep and thorough review. I have revised my present research paper in the light of their useful suggestions and comments. I hope my revision has improved the paper to a level of their satisfaction. Number wise answers to their specific comments/suggestions/queries are as follows.

**Response to Reviewer Comments**

**Reviewer 1**

**Comment:** Diagnostic value; no need for predictive

**Response:** As we mentioned in line 43-45 in manuscript ‘There is no single gold standard test for the diagnosis of CD, and the diagnosis of CD is based on a combination of clinical manifestations, the presence of the celiac-specific serological test, and the demonstration of villous abnormality on intestinal mucosal biopsy” **Thus we in deed for highly sensitive and specific noninvasive diagnostic test**

**Comment:** **And**

**Response:** in the revised manuscript we rewrote this sentence to be clear.

**Comment**: Not obvious 1% what, more, less., equal

**Response:** in the revised manuscript we rewrote this sentence to be clear.

**Comment:** No need for predictive

**Response:** as we mention HT is autoimmune disease associated with other diseases such as CD. Prediction of celiac disease is important as missed celiac disease in HT leads to malnutrition and affects thyroxin absorption.

**Comment:** How come? You in abstract mention that you include 50 pt and 50 control; here, you mention 60 case, 40 ctrl, How sample size was calculated? How do you make matching?

**Comment:** got lost with these numbers. You mention that you have 5 CD and in result, they became 11, again 50/50 in result as abstract yet in methods 60/40??????????????/

**Response:** Thank you for your thorough review and salient observations. We corrected the incorrect numbers, and the required changes were made and highlighted.

Sample size was calculated by IRB committee member .

**Comment**: I Think you need to explain meaning of operating technique

**Response:** in the recent requirements for promotion the plagiarism is decrease so the details of kits and instruments increase the similarity in plagiarism so we use this sentence “Testing was done according to operating techniques in Zagazig University Hospital biochemistry, medical microbiology, and immunology laboratories” to overcome this problem

**Comment:** You can not explain all continuous data as mean and SD, correct that

**Response:** Thank you for your thorough review and salient observations. h In the revised version, the required changes were made and highlighted.

**Comment:** Table said that there is no significant relation bw groups regarding BMI, here you say reverse?????

**Response:** Thank you for your thorough review and salient observations. In the revised version, the required changes were made and highlighted.

**Comment: Tables**

**Comment:** In this table where is post hoc test? Please add?

**Response:**Thank you for your thorough review and salient observations. h In the revised version, the required changes were made and highlighted.

**Comment:** Did you check for normality. It seems to me to be not normally distributed, so you can not use mean or SD

**Response:** In the revised version, we revised our results by SPSS .The required changes were made and highlighted.

**Comment:** Here you use correlation to assess linear relation bw mRNA and categorical data??? It is totally wrong. I think you need statistical consultation to choose best test for each relation

**Response:** table 2 was correlation test and in response to reviewer comments we added multivariate regression. In the revised version. The required changes were made and highlighted.

**Reviewer 2**

**Comment:** 1- According to Figure 1, to be enrolled, an inclusion criterion should be met (clinical + serological evidence of HT), and then 100 patients are enrolled. Of them, 50 are healthy; how come this? How healthy were they initially enrolled with the criteria of HT? Furthermore, in the methods section, it is mentioned that 60 patients with HT were enrolled, and 40 age and sex-matched healthy individuals were included.

**Response:** Thank you for your thorough review and salient observations**.** this study is a case -control study , the inclusion criteria was for case patients (HT) and as known control group includes healthy subjects **and we rewrite figure 1 to be clarify**

**Comment:** 2- The text needs to clarify how many patients in this cohort were diagnosed with HT and CD based on clinical and which type of immune markers and biopsies.

**Response:** in the figure 1 flow chart we mention that positive results of anti-tTG IgA antibody levels we diagnosed our CD by anti-tTG IgA so endoscopy was done for 11 patients with CD

**Comment:** 3- I explored the results section, and I cannot find the levels of lncRNA IFNG-AS1 in the three groups and the p-value between them.

**Response:** the level of lncRNA IFNG-AS1 was demonstrated in figure 4 and in section of results in line 111-113

**Comment:** 4- AUC and diagnostic accuracies given in the results section: are these used to explore lncRNA IFNG-AS1 as surrogate markers for HT and CD diagnosis?

**Response:** Yes, we applied ROC curve to assess AUC , the sensitivity and specificity of lncRNA IFNG-AS1 and the results were written in section of results

**Comment:** 5- What are the limitations of the current study?

**Response:** In the revised version, the required changes were made and highlighted.

**Comment:** Please define in the title

**Response:**

**Comment:** Why this specific non-coding RNA was evaluated among HT/CD patients. The authors need to present in a small paragraph a rationale for that.

**Response:**

**Comment:** This is different from the figures reported in the results section.

**Response:** In the revised version, the required changes were made and highlighted.

**Comment:** These fits discussions

**Response:** In the revised version, the required changes were made and highlighted.

**Comment**: this is a correct statistical term; it is a linguistic term that fit discussion more than here?

**Response:** In the revised version, the required changes were made and highlighted.

**Comment:** Not consistent with the data presented in Figure 1?

**Response:** we corrected the data in the revised manuscript

**Comment:** Concerning CD, the predictive power of IFNG-AS1 had sensitivity and specificity of 63.3% and 53%, respectively? These figures canot justify recommending this test for CD diagnosis.

**Response:** this figures of ROC curve and the finding according to selected cutoff with highest sensitivity and specificity of lncRNA IFNG-AS1 .

**Comment:** Can please some multivariate regression to predict which is reliable associations?

**Response:** In the revised version, the required changes were made and highlighted

**Reviewer 3**

**Comment:** Referee to figure 5 a and 5 b

**Response:** In the revised version, the required changes were made and highlighted

**Comment:** The mean age of patients was 34 year was the pediatric criteria eligible for it

**Response:** as CD maily diagnosed during childhood so we used updated European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) as international guidelines for adult CD are scarce but this guideline is mainly the same to British guidelines .

**Comment:** Add methodology or instrument name of anti-TG, anti-TPO, and TTG IgA

**Response:** In the revised version, in figure 1 .the required changes were made and highlighted

**Editor Comments to Author:**1. Please check the author names and affiliations included on your Title Page, mainly that the spelling of all authors' names is correct. They are cited in the order you wish them to appear in the final article. In addition, each author's affiliation details are correct.
2. Please include a 'Structured Abstract': not more than 250 words, broken down into, i.e., Aims, Patients & Methods/Materials & Methods, Results, and Conclusions. For authors presenting the results of clinical trials, the guidelines recommended by CONSORT should be followed when writing the abstract (http://www.consort-statement.org/), and the clinical trial registration number should be included at the end of the abstract, where available.
3. Please include up to 10 keywords in your revised manuscript (including the four keywords you selected as part of the submission process).
4. Please amend the references as per the author's guidelines:
a. References should be numerically listed in the reference section in the order they occur in the text.
b. References should appear as a number, i.e., [1, 2] in the text.
c. References should cite three authors et al.: It is our house style to list a maximum of six authors, and if there is more than this, three authors et al.
5. Please ensure all tables and boxes are titled and cited in the text. Three-line tables are preferred.
Please find a link to the African Journal of Gastroenterology and Hepatology Author Guidelines, which explains these sections in more detail: https://ajgh.journals.ekb.eg/journal/authors.note.
6. Please check the PDF file of your manuscript regarding plagiarism checking.
7. Please add the scale bar, annotations, magnifications, and program that generated these figures. Also, it is better to submit figures with high resolution and brightness.