Reviewer’s report

Title: Molecular Diagnosis and Comprehensive Treatment of Multiple Endocrine Neoplasia Type 2 in Southeastern Chinese

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Reviewer: sergio toledo

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The manuscript “Molecular diagnosis and comprehensive treatment of multiple endocrine neoplasia type 2 in Southeastern China” reports interesting topics on the subject. 33 cases were studied from 9 affected families. The aa. confirm the efficacy and safety of Vandetanib therapy in a MTC patient. Also, the feasibility of total thyroidectomy for treating and prevent MTC is confirmed. Further, the aa. report good surgical and clinical results using the cortical-sparing adrenalectomy approach for treating Pheo/MEN2A cases, confirming previous data. Six MTC patients were considered cured based on postsurgical calcitonin levels, despite that in some cases thyroidectomy was performed relatively late. It is discussed that MEN2A Chinese patients might have a lower prevalence of HPT than White populations. Also, 13 family members could be screened, although 7 cases declined thyroid surgery.

However, some points must be considered in an attempt to suggest some improvements to the ms.

1 – Hyperparathyroidism (HPT) is said to be absent in these cases. However, the serum values of PTH, Calcium and PTH/calcium rates of each patient are lacking, which prelude further conclusions.

2- values of cathecolamines, metanephrines, CEA, phosphate, etc of each case was not added. They should be shown in a table or in the text.

3- Results – page 7, line 11 – it would be better to analyze index-cases and screening family members separately.

Page 7, line 19 and in other parts of the ms : try to correlate phenotype data with genotype findings.

4 – the Discussion should be shortened in at least 30%; avoid repetition.

5- Please comment on several cases that were submitted to total thyroidectomy at relatively later ages, considering the ages mentioned in the ATA recommendations (Kloos et al 2009). Also, discuss on some cases that were considered cured despite relatively late thyroid surgery.

6 – in several MTC cases, few neck lymph nodes were resected and analyzed (table 3)
7- if age was evaluated using the mean, then SD may be added (table 3); the same for tumor size (table 2).

8 – Cases with 78y, F7-II 2/F and F3-III 9/F had neck LN metastasis ? and two cases with calcitonin > 60 pg/ml were fully studied for the presence of metastasis ?

9- comment that MEN2B patient was diagnosed late despite typical clinical signs.

10- page 4, line 18 – systemic or systematic ?

11- parents and grand-fathers were personally investigated ?

12- Reference 8 (page 17) – please cut: Task F ; begin with Kloos.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests.