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## Selective use of radioactive iodine justifying “greater latitude to offer hemithyroidectomy” - ‘Putting the cart before the horse’

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Dear Editor,

We read with interest the review paper by Marti J.L. et al., entitled “Selective use of radioactive iodine (RAI) in thyroid cancer: No longer ‘one size fits all’”, published in EJSO 44 (2018) 348–356 [1]. The Authors reviewed the present role of RAI therapy (RAIT) mostly repeating the 2015 American Thyroid Association (ATA) guidelines, adding just a few unaffiliated articles. In spite of all their hard work, we have to disagree with the analysis and conclusion by Marti J.L. et al.

First of all, we assure our American colleagues that the standard of RAIT practice in Europe does not follow the “one size fits all” approach nor has it ever, to the best of our knowledge. It is presumptuous of Marti et al. to assert expertise in RAIT for Differentiated Thyroid Cancer (DTC) and export their opinions to Europe. They conveniently selected the literature that supports their points of view while ignoring many contradictory publications. Mark Tulchinsky had already addressed some of the glaring errors in the authors’ take on the RAI-related history [2].

We are astounded that Marti et al. ignored the landmark study by Mazzaferri and Jhiang [3] that remains the only prospective U.S. study with a long follow-up after RAIT in a variety of patient with DTC. The study showed that RAIT significantly reduced the recurrence and DTC-specific mortality rates. Many other retrospective studies confirmed utility of adjuvant RAIT but cannot be listed here since only four references are allowed for the letters. The only cited Mazzaferri paper was a review article, which was cited by Marti et al. in support of “... RAI administration was simplistically based upon tumor size and external spread ...”. That was a simplistically misrepresented message of the article that aimed to summarize definitions and management recommendations for the low-risk thyroid cancer patients specifically as formulated at the time by the ATA and their European counterparts. Another simplification by Marti

et al. was elevation of the 2015 ATA guidelines to the level of a doctrine, reciting it almost verbatim in their “Current indication for RAI use” section. Conveniently neglected was the fact that many specialty societies have not endorsed this document, including among many were the American College of Radiology, Society of Nuclear Medicine and Molecular Imaging and the American College of Nuclear Medicine. Particularly of note is the strong criticism of the document that was issued by the European Nuclear Medicine Association [4].

Marti et al. state that “A stimulated Tg < 0.5-1 is reassuring with a > 98% likelihood of identifying patients free of disease”, again neglecting contradictory evidence that showed basal and/or stimulated Tg of < 1 µg/L as a much less reliable indicator for selecting best candidates for RAIT after thyroidectomy. This is particularly true for low-to-intermediate risk DTC patients [5].

The authors state that “A consequence of more selective RAI use is that surgeons can now, in parallel, offer more personalized surgery, no longer needing to remove the entire gland in every thyroid cancer patient.” We assure Marti et al. that surgeons in Europe have practiced personalized surgery for decades, performing patient-tailored thyroidectomy, based on individual patient circumstances and pathological tumor characteristics. The type of thyroidectomy was always a choice and has been practiced by far more frequently than in the USA even 3 years post the 2015 ATA guideline. It would have been most contributory if the 3 surgical specialists could have shared with the readership their personal statistics on extent of thyroidectomy they have been performing in the past 3 years along with specific criteria they use. As European surgeons, we determine the extent of thyroidectomy not to follow the “temporary” indication for RAIT but, on the contrary, the need for RAIT is determined as a consequence of the personalized surgery.

In conclusion, Marti et al. are “preaching to the converted” and, in the process, presuming entitlement to the pulpit as they offer no evidence to show that they “practice what they preach.”

### References

- [1] Marti JL, Morris LGT, Ho AS. Selective use of radioactive iodine (RAI) in thyroid cancer: No longer “one size fits all”. *Eur J Surg Oncol* 2018;44:348–56.
- [2] Tulchinsky M. Selective history of radioactive iodine in medicine: inexactitudes no longer. *Eur J Surg Oncol* 2018 Sep 6. <https://doi.org/10.1016/j.ejso.2018.06.038>. pii: S0748-7983(18)31298-8, Accessed Sep. 6, <https://www.ncbi.nlm.nih.gov/pubmed/30243466>.
- [3] Mazzaferri EL, Jhiang SM. Long-term impact of initial surgical and medical therapy on papillary and follicular thyroid cancer. *Am J Med* 1994;97:418–28.
- [4] Verburg FA, Aktolun C, Chiti A, Frangos S, Giovannella L, Hoffmann M, et al. Why the European Association of Nuclear Medicine has declined to endorse the 2015

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American Thyroid Association management guidelines for adult patients with thyroid nodules and differentiated thyroid cancer. *Eur J Nucl Med Mol Imaging* 2016;43:1001–5.

- [5] Campenni A, Giovanella L, Pignata SA, Vento A, Alibrandi A, Sturiale L, et al. Undetectable or low (<1 ng/ml) postsurgical thyroglobulin values do not rule out metastases in early stage differentiated thyroid cancer patients. *Oncotarget* 2018;9:17491–500.

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