



Low-Dose radioiodine ablation in patients with not High-Risk Differentiated Thyroid Cancer

F. Spyroglou, E. Giannoula, E. Papanastasiou, G.Gerasimou, A. Doumas, I Iakovou

Department of Nuclear Medicine, Aristotle University, AHEPA hsp, Thessaloniki

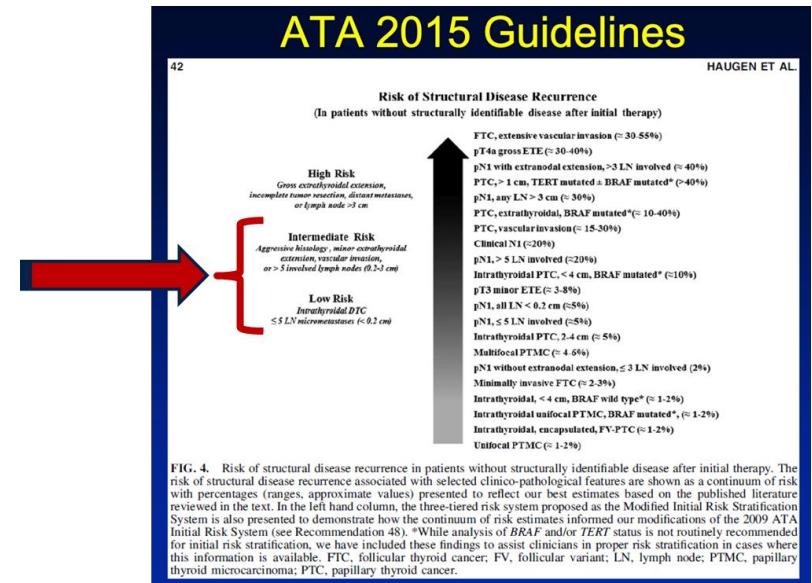
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Aim: To determine the efficacy of low dose ^{131}I ablation therapy in patients with not high-risk DTC.

Inclusion criteria:

- (i) pT1a-T3/N0-x/M0 disease stage,
- (ii) macroscopic complete resection of the tumour and
- (iii) neither aggressive histology (tall cell, columnar cell carcinoma, etc.) nor vascular invasion existence.



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Patients: 52 pts (51.2 ± 13.4 yrs, 46 females)

All pts received 30mCi ¹³¹I after typical rhTSH stimulation protocol.

Response-to-therapy status assessment was performed 6-8 months after ablation using a rhTSH simulated whole-body scan and was classified as complete (excellent response) or incomplete response (structural incomplete, biochemical incomplete or indeterminate response) according to ATA guidelines.

Age,
Gender,
Histology,
Tumour multifocality and size,
Stage,
Time from surgery to treatment,
Preablation serum thyroglobulin (pTg),
pAbTg antibodies and
TSH (pTSH) levels
were also analysed in order to predict complete response rate

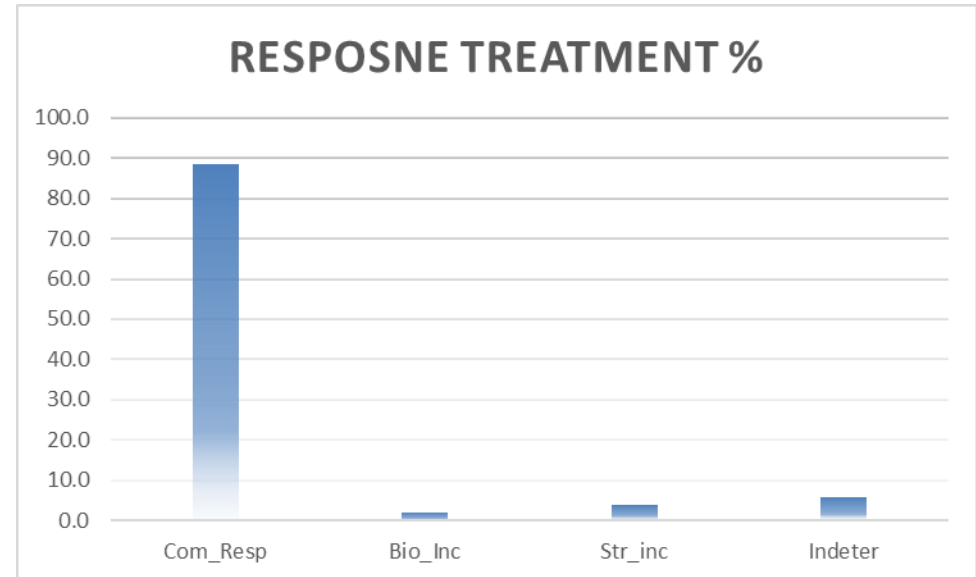
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| Excellent Response <i>No clinical, biochemical, or structural evidence of disease</i> |
| Biochemical Incomplete Response <i>Persistent abnormal thyroglobulin values or rising anti-thyroglobulin antibody levels in the absence of localizable disease</i> |
| Structural Incomplete Response <i>Persistent or newly identified loco-regional or distant metastases</i> |
| Indeterminate Response <i>Non-specific biochemical or structural findings which cannot be confidently classified as either benign or malignant</i> |

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Results: Based on whole-body scan and rhTSH stimulation test

(88.5% patients achieved complete response while the rest of them were classified with incomplete response (1.9%, 3.8% and 5.8% due to biochemical incomplete, structural incomplete and indeterminate response respectively



- ❖ Pre-ablation pTg levels of patients with complete response were calculated lower than these of patients with incomplete response (3.9 ± 6.1 vs. 6.2 ± 9.5 ng/mL with limited statistical significance, $p = 0.5$).
- ❖ Tumour size, pTg and pAbTg were the only factors related to treatment response ($p < 0.0$, $p = 0.04$ and $p < 0.01$, respectively).
- ❖ Interestingly, pAbTg level was the only independent factor related to complete-response outcome.

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Conclusions:

- ✓ A low administered dose of 30mCi of ^{131}I , under rhTSH stimulation, is really efficient for successful ablation treatment of patients with not high-risk Differentiated Thyroid Cancer.
- ✓ Tumour size, pTg and pAbTg were the only factors found statistically related to treatment response.