

Appendix

Page 2: **Epidemiology and patients included per center.**

Page 3: **Pathology at first thyroidectomy in patients with thyroidectomy after 12 months old.** TNM classification based on AJCC 7th edition. Structural and biochemical remission was defined by normal calcitonin and carcinoembryonic antigen (CEA) levels and no residual disease on imaging; persistent disease was defined by increased calcitonin and/or CAE with no residual disease on imaging and/or pathological cervical lymph nodes on imaging and/or systemic metastases.

Page 4 : **Previous studies reporting patients included in this series (data were updated in comparison with the original study)**

Patients' Center

Geographical origin was Europe in 172 (49.9%), North America in 78 (22.6%), South America in 48 (13.9%) and Asia/Oceania in 47 (13.6%). More in detail, the list of Centers was as follows

- Less than 5 patients included: Endocrinology, Lisbon (Portugal); Hospital italiano (Buenos Aires, Argentina); DIMED, Padua (Italy); Endocrinology Unit, Florence (Italy); Hospices civils Lyon (France); Aix-Marseille University (France); Endocrinology, Angers (France); Endocrinology, Nancy (France); Endocrinology Milan (Italy); Endocrinology, Rome (Italy); Endocrinology, Bruxelles (Belgium); Endocrinology, Toulouse (France); Pediatrics, Zagreb (Croatia); Nephrology, Freiburg (Germany); Endocrinology, Montreal (Canada); Endocrinology, Lille (France)
- 5-10 patients included: Endocrinology, Budapest (Hungary); Universidad de Chile (Chile); India; Endocrinology, Nantes (France); Endocrine Oncology Division, São Paulo (Brazil); Universidade Federal do Rio Grande do Sul (Brazil); ORL Head and neck surgery, Copenhagen (Denmark); Institute of Sanitary Research of Asturias (Spain);
- 10-20 patients included: Centro de Investigaciones Endocrinológicas (Argentina), Department of Oncologic and Urologic Surgery (Hangzhou, China), department of endocrinology of Pisa (Italy), University of Michigan (USA), NIH (Bethesda, USA)
- 20-30 patients included: Institut Gustave Roussy (France), Department of Molecular Endocrinology (Czech republic), Department of Nuclear Medicine and Endocrine Oncology Gliwice (Poland), Japan (3 Centers),
- > 30 patients included: Martin Luther University and University Essen (Germany), MD Anderson Cancer Center (Texas, USA)

Pathology at first thyroidectomy in patients with thyroidectomy after 12 months old.

	Available TNM data	T1	T2	T3	T4	N0	N1	M0	M1
Biochemical and structural remission (n=47)	34 (72.3%)	23 (67.6%)	9 (26.5%)	1 (2.9%)	1 (2.9%)	18 (52.9%)	16 (47.1%)	34 (100%)	0
Persistent disease (n=207)	157 (76%)	51 (32.5%)	43 (27.4%)	49 (31.2%)	17 (10.8%)	20 (12.7%)	137 (87.3%)	133 (84.7%)	24 (15.3%)
Deceased of MTC (n=48)	31 (64.5%)	8 (25.8%)	7 (22.6%)	6 (19.4%)	10 (32.2%)	2 (6.5%)	29 (93.5%)	17 (54.8%)	14 (45.2%)

TNM classification based on AJCC 7th edition. Structural and biochemical remission was defined by normal calcitonin and carcinoembryonic antigen (CEA) levels and no residual disease on imaging; persistent disease was defined by increased calcitonin and/or CAE with no residual disease on imaging and/or pathological cervical lymph nodes on imaging and/or systemic metastases.

Previous studies reporting patients included in this series (data were updated in comparison with the original study)

First Author/year	Journal	Number of patients included in our study	Remark
<i>Castinetti/2014</i>	Lancet Oncology	29	No precise data on MTC
<i>Makri/2018</i>	J Clin Endocrinol Metab	10	No precise data on MTC
<i>Raue/2018</i>	J Clin Endocrinol Metab	38	No precise data on management
<i>Mathiesen/2017</i>	Endocr related Cancer	7	No precise data on management
<i>Imai/2013</i>	Eur J Endocrinology	13	No precise data on MTC
<i>Leboulleux/2002</i>	Cancer	18	