

**RTF**

# Robotic Thyroid Data Forms

Robotic Thyroid Registry - eHNS

Case #

PLACE LABEL HERE

American Robotic Thyroid Registry

Institution

Patient Study ID

**INSTRUCTIONS: To be completed during initial evaluation.** Dates are recorded as **mm-dd-yyyy** unless otherwise specified.

DATE OF EVAL \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

1 Case #  2 AGE  3 GENDER   
1 Male 2 Female4 HEIGHT (cm)   5 WEIGHT (kg)   6  PRE-OP LARYNGOSCOPY?  
0 No 1 Yes**[Pathology]**7  PRE-OP FINE NEEDLE ASPIRATION  
0 Not Done 5 Papillary Thyroid CA  
1 Colloid 6 Follicular Thyroid CA  
2 Follicular Lesion 7 Medullary Thyroid CA  
3 Follicular Neoplasm  
4 Suspicious for PTC 9 Non-diagnostic8 Specimen Size (HxWxD in cm)  
\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_9 TUMOR LARGEST DIAMETER (cm)  10  MULTIPLICITY  
0 No 1 Yes11  FINAL PATHOLOGY  
1 Follicular Lesion 6 Colloid  
2 Follicular adenoma 7 Thyroiditis, lymphocytic  
3 Papillary Ca 8 Adenomatoid nodule  
4 Follicular Ca 9 Hyperplastic nodule  
5 Medullary Ca 10 Other \_\_\_\_\_12  Parathyroids on Path Specimen?  
0 No 1 Yes**[Operation]**13  Laterality (R/L/Bilateral)14  Extent of Surgery  
1 Lobectomy 4 partial lobectomy  
2 Subtotal Thyroidectomy  
3 Total Thyroidectomy15  Chest Port?  
0 No 1 Yes16  Conversion to Open?  
0 No 1 Yes

Details: \_\_\_\_\_

17  Operative times recorded?0 No 1 Yes  
If yes complete 17a-d with available data (in min)17a Total Operative Time    skin-to-skin17b Working Space Time   17c Docking Time   17d Console Time   18  Use of RLN monitoring Tube?  
0 No 1 Yes Did NIMS change  
or improve RLN dissection?

(Please Specify) \_\_\_\_\_

19  Retractor Used1 Chung/BioRobotics 2 Koppersmith  
3 Other (Please Specify) \_\_\_\_\_20  Arm Position1 Chung  
2 Ikeda  
3 Modified

(Please Specify) \_\_\_\_\_

**RTF**

**NARTR – Data Form**

NARTR - eHNS

Case #

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Patient Study ID

**[Complications]**

21  **Intra Operative Hemorrhage (>50cc)?**  
0 No            1 Yes

22  **Tracheal Injury?**  
0 No            1 Yes

23  **Skin Injury?**  
Button-hole, Skin Abrasion, Bruising or Burns  
0 No            1 Yes

24  **RLN Weakness?**  
0 No            1 Yes  
If Temporary, resolved in  Weeks

25  **Brachial Plexopathy?**  
0 No            1 Yes  
If Temporary. Resolved in  Weeks

26  **Post-Op Hypocalcaemia?**  
0 No            1 Yes  
If Temporary. Resolved in  Weeks

27  **Post-Op Fluid Collection**  
0 No  
1 Blood  
2 Serum  
3 Chyle

**[Post-Op]**

28  **Surgery as an Outpatient?**  
Overnight or <23 hour observation  
0 No            1 Yes  
 If hospital stay >23hr list total number of days

29  **Dyesthesia Over Working Space?**  
0 No            1 Yes  
If Temporary. Resolved in  Weeks

30  **Was Radioactive Iodine Given?**  
0 No            1 Yes

If yes, dose \_\_\_\_\_ milliCuries; date:    /    /

31  **Post-operative Laryngoscopy**  
0 No  
1 Yes (details: \_\_\_\_\_ )

32  **Patient Status at Last Follow Up**  
0 No Evidence of disease  
1 Recurrence

33 **Follow Up Period**  **months**

34  **Normal Voice @ 6 weeks?**  
0 No  
1 Yes

35  **Post-operative dysphagia @ anytime?**  
0 No  
1 Yes

36 **Additional Notes and Comments**

**Supplemental Table 1.** Inclusion criteria for studies (from literature search)

<i>Inclusion criteria</i>	<i>Reference</i>
<b>Malignant lesions inclusion criteria</b>	
Follicular carcinoma	11, 15, 40
Papillary carcinoma	11, 15, 41
Microcapillary carcinoma	43, 20
Medullary carcinoma	42
Malignant nodules <4cm	40
Malignant nodules <5cm	21
Malignant nodules <6cm	43
Well-differentiated carcinoma <2cm	12, 15, 36, 38, 39, 41, 44
Well-differentiated thyroid carcinoma, tumour size <4cm	20, 42
Papillary carcinoma <2cm	44
Well-differentiated thyroid carcinoma with clinical lateral LN metastases (1 or 2 minimal metastatic LN on lateral neck)	20
Tumour with minimal invasion to anterior thyroid capsule and strap muscle	20, 42
<b>Benign lesions inclusion criteria</b>	
Colloid lesions	41
Multinodular goitre	41
Follicular adenoma	11, 43
Benign hyperplastic nodules	43
Graves' disease	11
Adenomatoid nodules	11
Thyroiditis	11
Benign lesions <5cm	12, 15, 38, 41
Benign lesions <4cm	40

**Supplemental Table 2.** Exclusion criteria in studies (from literature search)

<i>Exclusion criteria</i>	<i>Reference</i>
<b>General characteristics (malignant or benign lesions)</b>	
Thyroiditis	41
Severe thyroiditis (relative contraindication)	40
Severe Graves' disease	12, 14, 15, 36, 38
Advanced Graves' disease with substernal thyromegaly	16, 35
Substernal / retropharyngeal goitre	16
Lesions in thyroid dorsal area	12, 14, 15, 35, 36, 38, 39, 44
History of neck surgery	12, 14, 15, 16, 35, 36, 38
<b>Characteristics specific to malignant disease</b>	
Poorly differentiated thyroid cancer	40
Advanced malignancy with T3 or T4 lesions	16
Lateral lymph node involvement	40
Multiple lateral lymph node involvement	12, 14, 15, 36, 38, 39, 42, 44
Multilevel lateral lymph node involvement	20
Cervical lymph node involvement	16, 35
Any lymph node involvement	41
Metastatic lymph node involvement	16, 35
Perinodal invasion at metastatic LN	12, 14, 15, 20, 36, 38, 39, 42, 44
Extrathyroidal invasion (adjacent structures)	12, 14, 15, 20, 35, 36, 38, 39, 40, 41, 42, 44
Distant metastatic disease	12, 14, 35, 36, 38, 39, 40, 41, 44