

# EUROCRINE Benchmark Report on Operations for Primary Hyperparathyroidism



## Investigated Clinic

- Carlanderska Endokrirkirurgi
- Gastro Center Skåne
- Kirurgiska kliniken, Borås
- Kirurgiska kliniken, Eksjö
- Kirurgiska kliniken, Falun
- Kirurgiska kliniken, Gävle
- Kirurgiska kliniken, Göteborg
- Kirurgiska kliniken, Halmstad
- Kirurgiska kliniken, Jönköping
- Kirurgiska kliniken, Kalmar
- Kirurgiska kliniken, Karlskrona
- Kirurgiska kliniken, Karlstad
- Kirurgiska kliniken, Kristianstad
- Kirurgiska kliniken, KS Solna
- Kirurgiska kliniken, Kungälv
- Kirurgiska kliniken, Linköping
- Kirurgiska kliniken, Luleå
- Kirurgiska kliniken, Lund
- Kirurgiska kliniken, Norrköping
- Kirurgiska kliniken, Nyköping
- Kirurgiska kliniken, Örebro
- Kiruraiska kliniken, Östersund

## Benchmark Clinics

- Markera alla
- Carlanderska Endokrirkirurgi
- Gastro Center Skåne
- Kirurgiska kliniken, Borås
- Kirurgiska kliniken, Eksjö
- Kirurgiska kliniken, Falun
- Kirurgiska kliniken, Gävle
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- Kirurgiska kliniken, Luleå
- Kirurgiska kliniken, Lund
- Kirurgiska kliniken, Norrköping

## Investigated Year

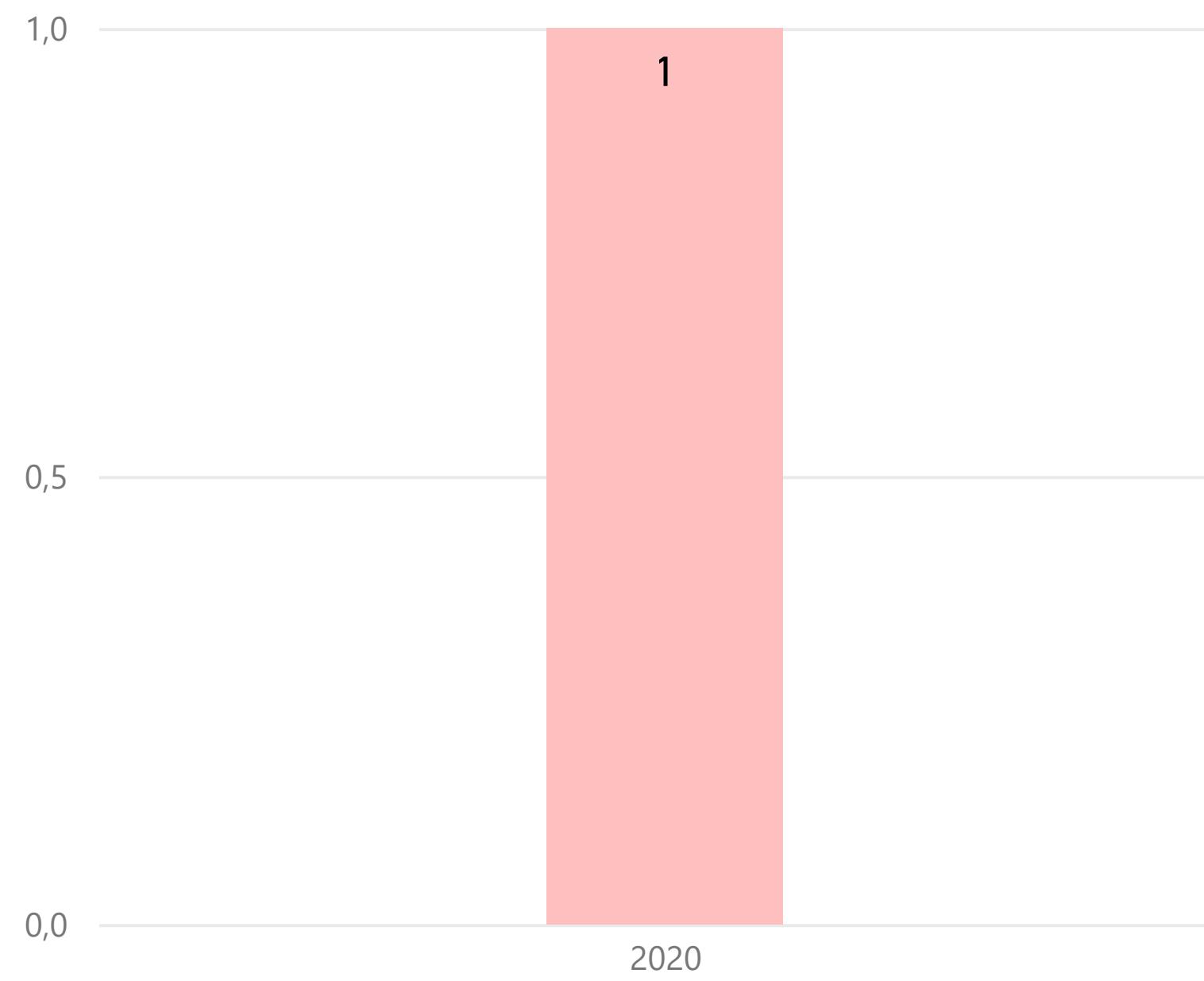
- Markera alla
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021

Report compiled by Anders Bergenfelz, Thomas Clerici and Thomas Musholt

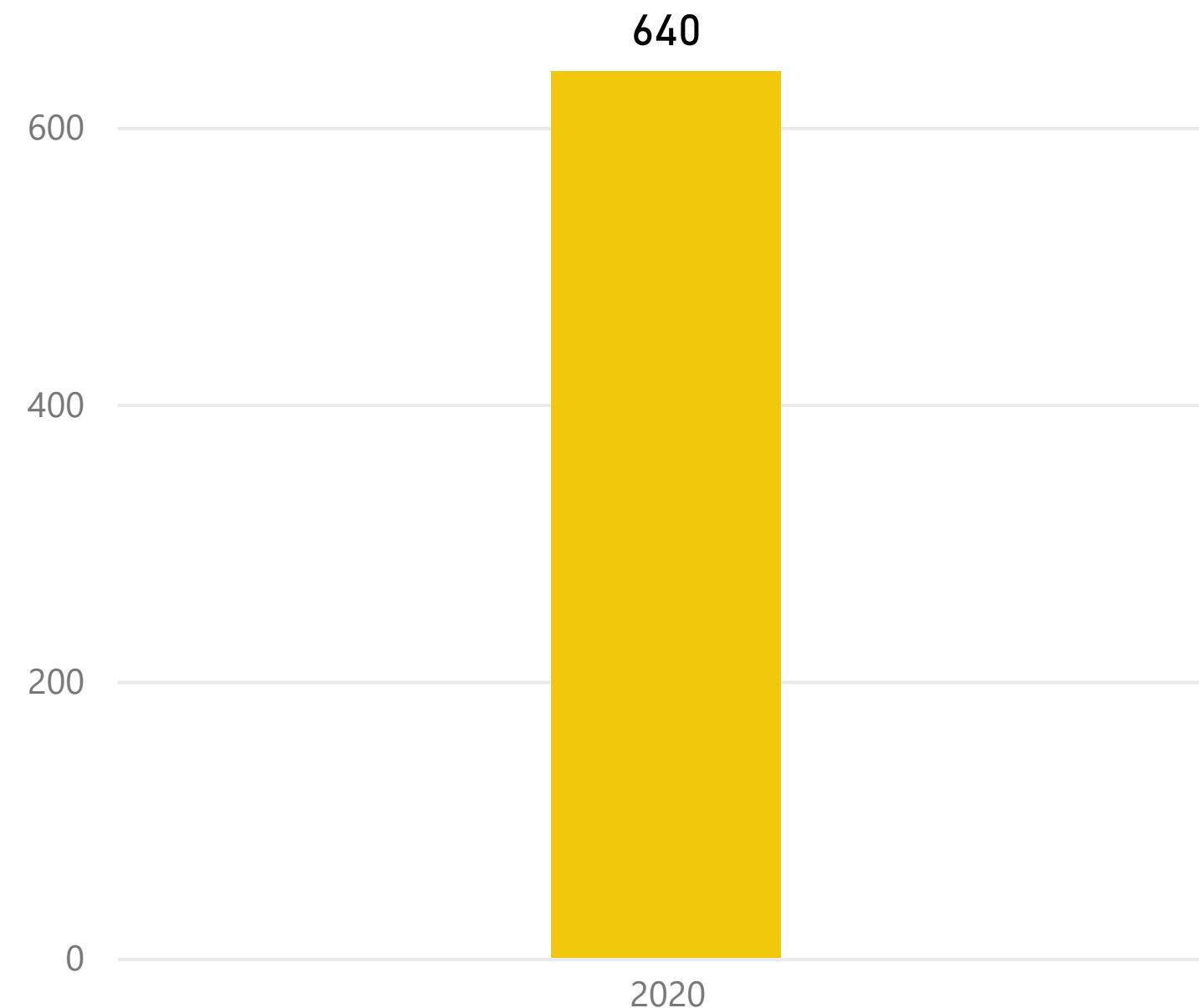
# EUROCRINE Benchmark Report on Operations for Primary Hyperparathyroidism



Registered Parathyroid Operations  
in Your Clinic



Registered Parathyroid Operations in  
Other EUROCRISE Clinics of Your Country



Investigated Year

- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021

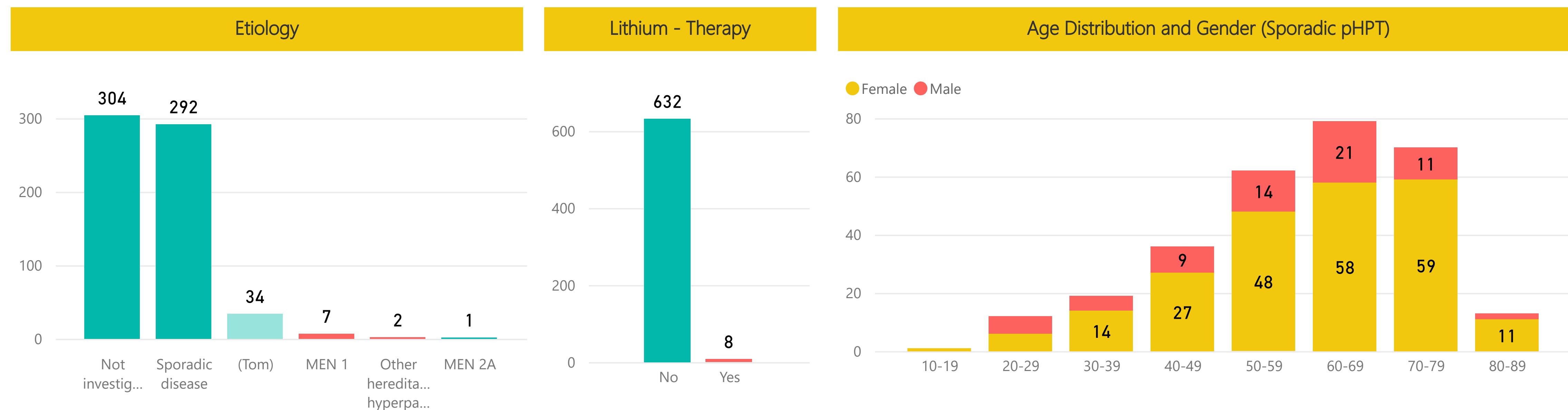
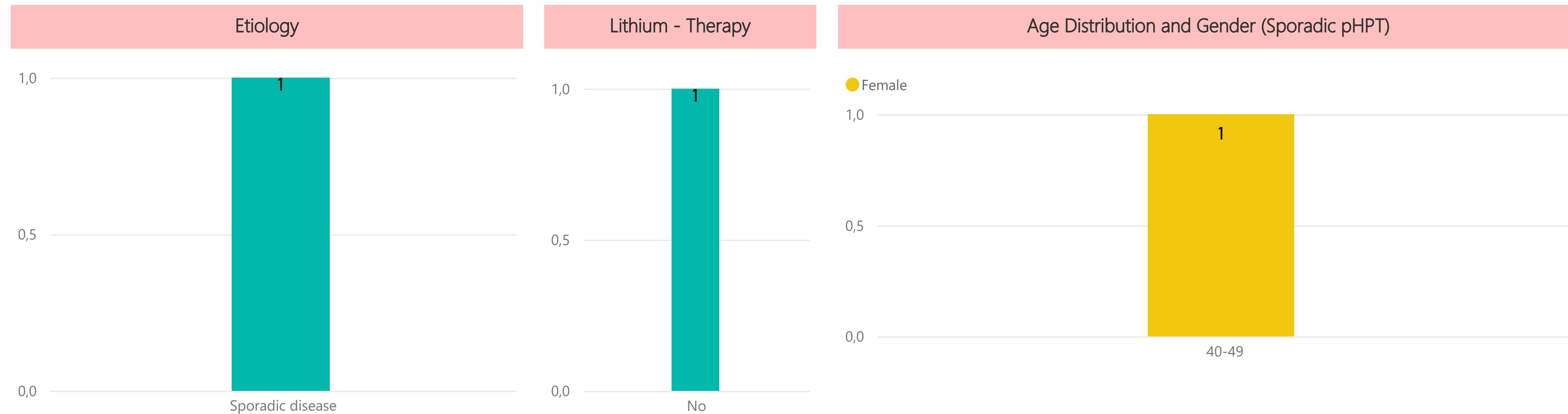
Color Coding in this Report:

Your Clinic

Other EUROCRISE Clinics in Your Country

# Parathyroids

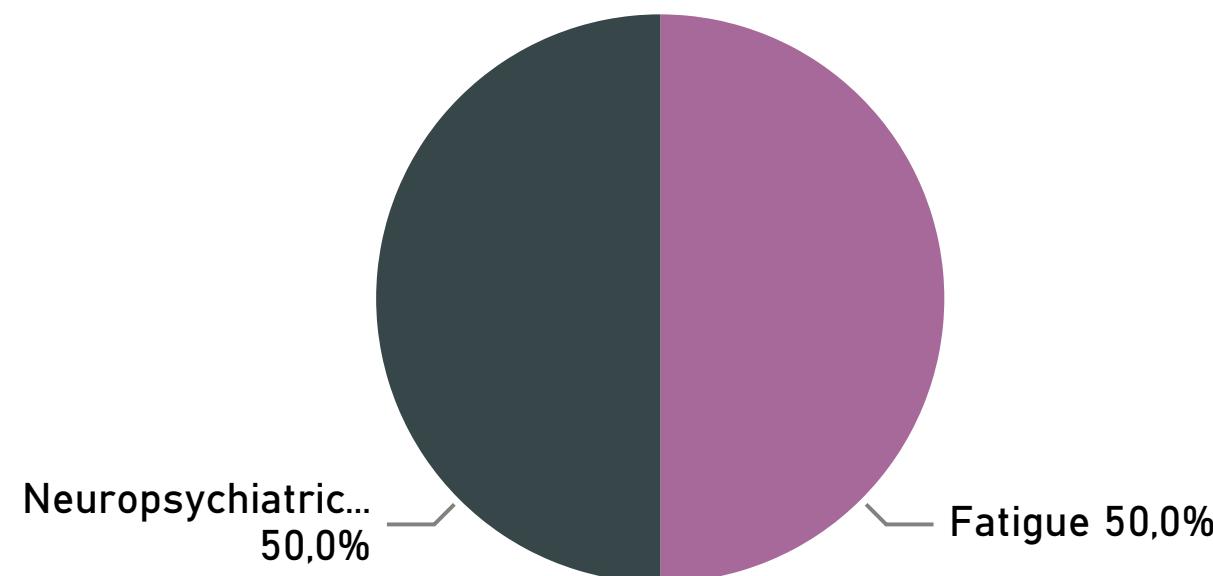
## Etiology, Age Distribution



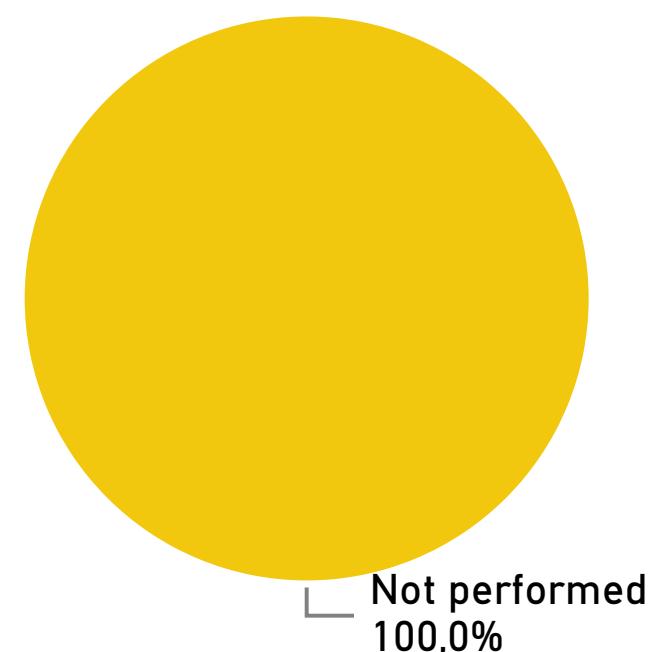
# Parathyroids

## Symptomatology and Preoperative Workup, Sporadic Disease, Primary Operations

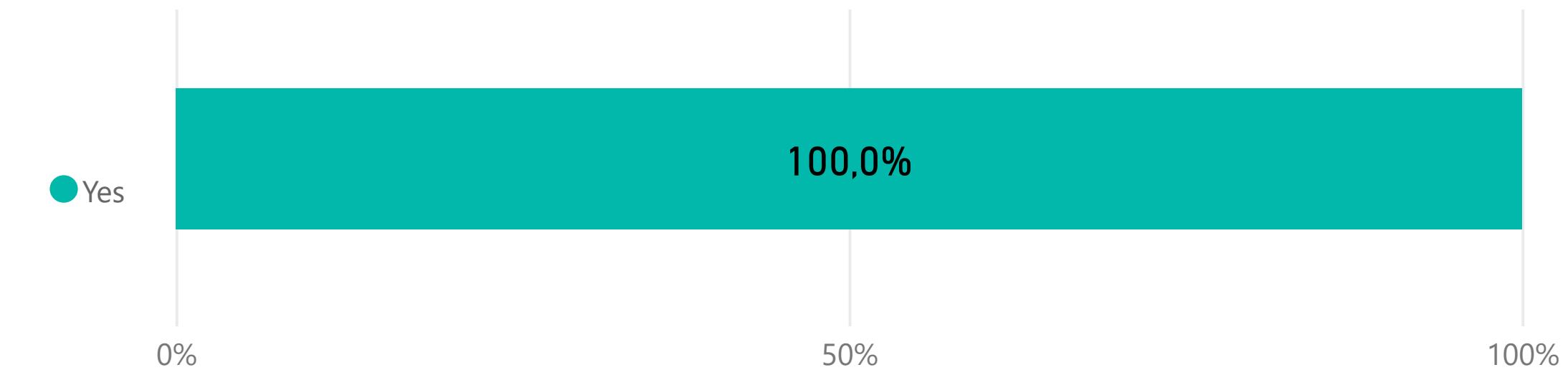
Preoperative Symptomatology



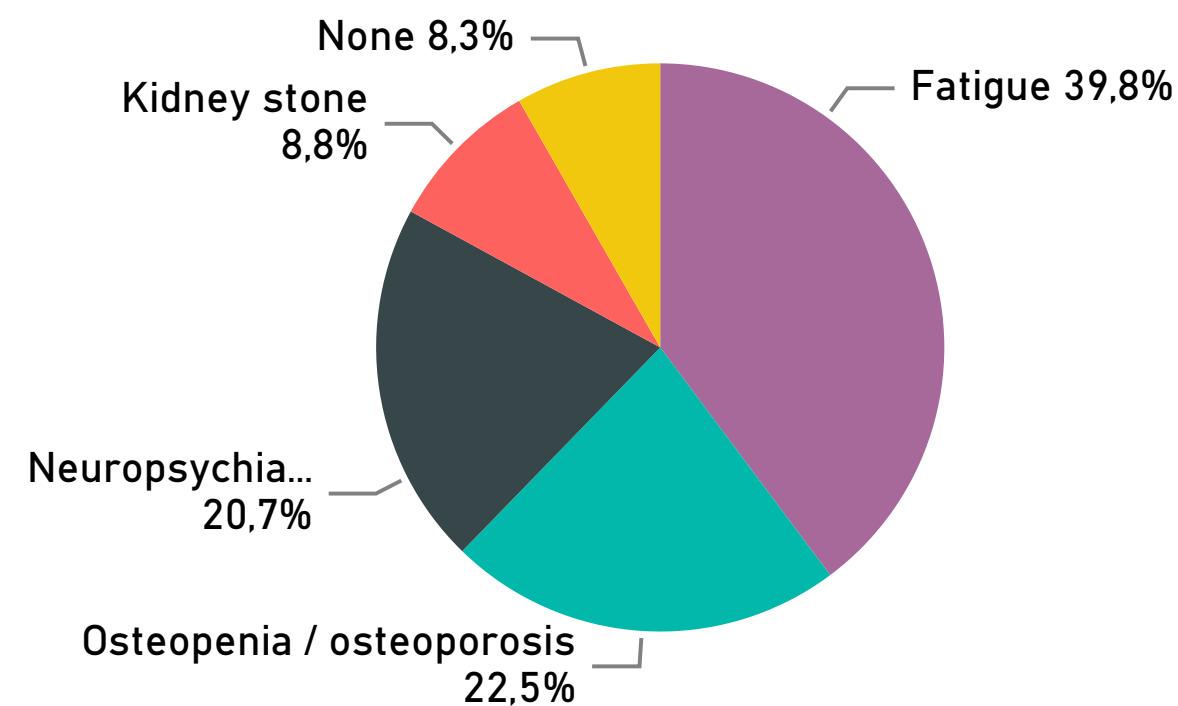
Preoperative Laryngoscopy



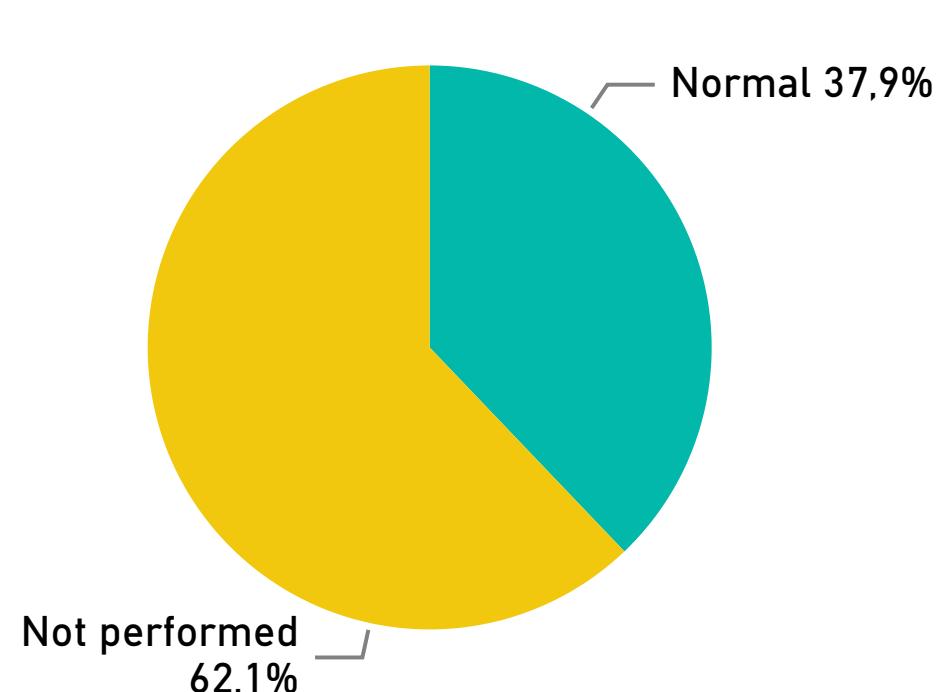
Localisation Examinations Performed



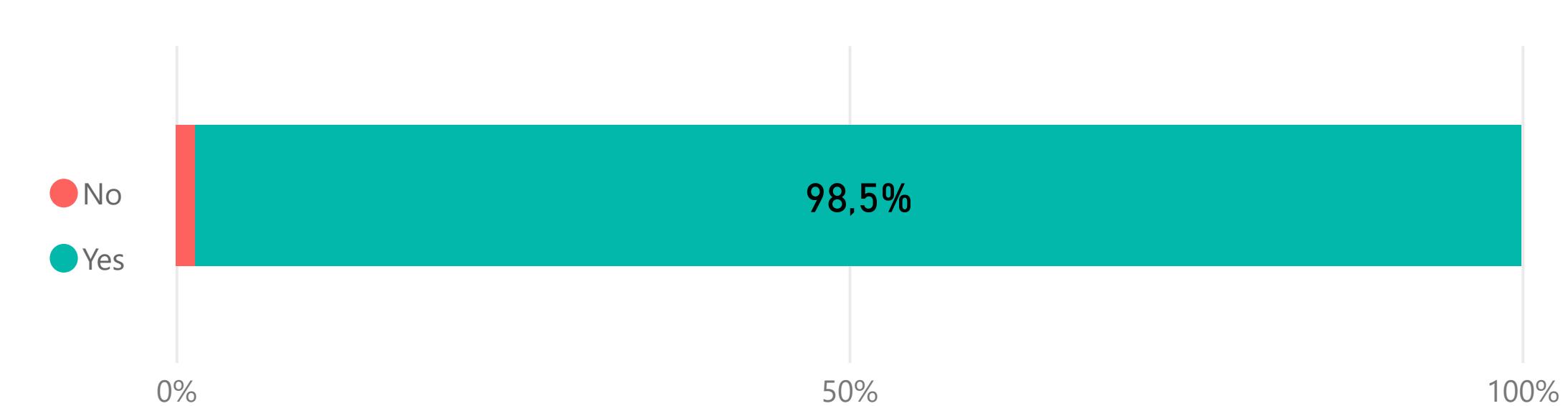
Preoperative Symptomatology



Preoperative Laryngoscopy



Localisation Examinations Performed

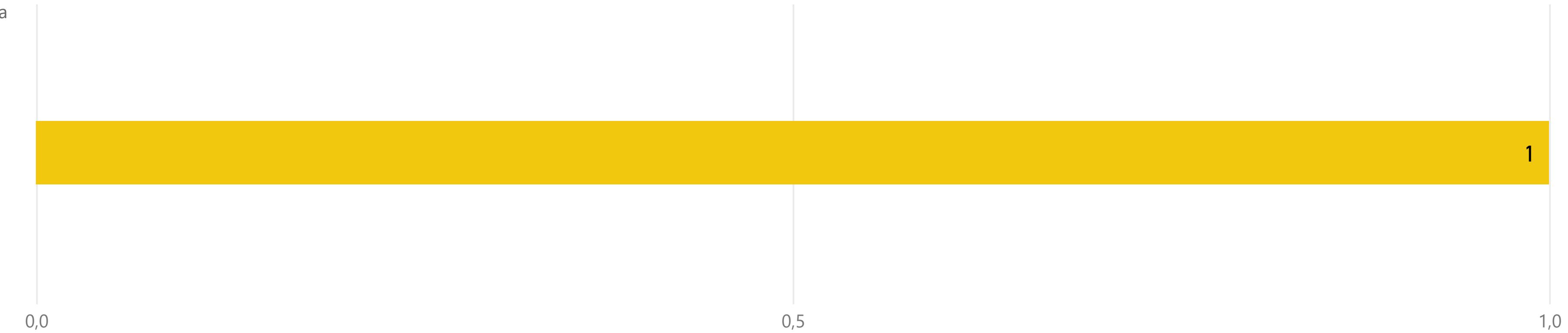


# Parathyroids

## Preoperative Imaging: Ultrasound, Sporadic Disease, Primary Operations

### Preoperative Ultrasound in Relation to Intraoperative Finding

Yellow circle: False prediction of multiglandular disease in solitary adenoma



### Preoperative Ultrasound in Relation to Intraoperative Finding

(Tom)

Correct position of one pathological gland, but multiglandular disease ...

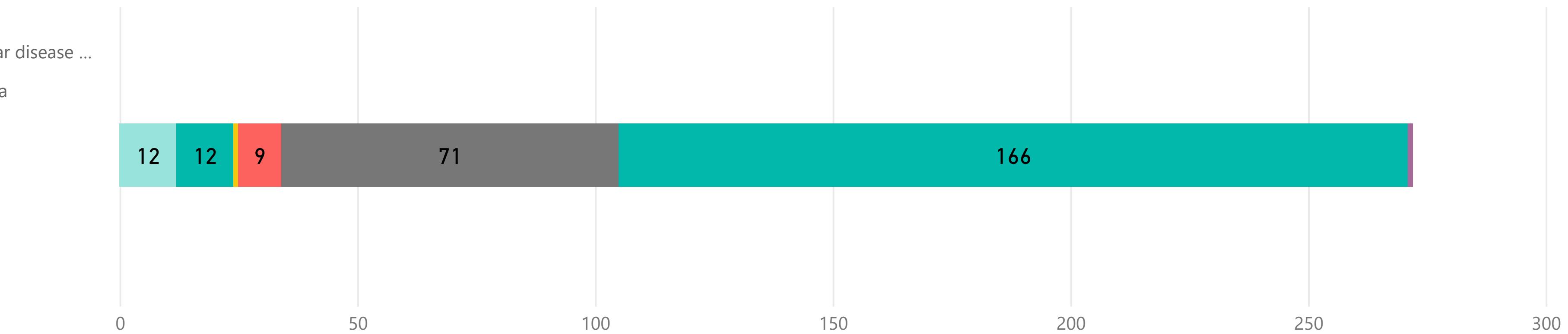
Yellow circle: False prediction of multiglandular disease in solitary adenoma

Red circle: False pre-op localisations of solitary adenoma (FP)

Grey circle: Negative / inconclusive pre-op examination

Cyan circle: True pre-op localisation of solitary adenoma (TP)

Purple circle: True pre-op prediction of multiglandular disease

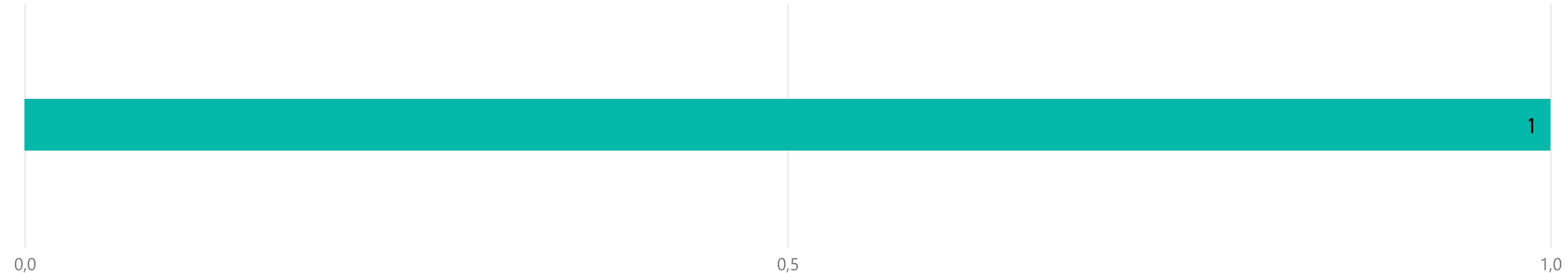


# Parathyroids

Preoperative Imaging: Sestamibi-Scintigraphy, Sporadic Disease, Primary Operations

## Preoperative Mibi-Scintigraphy in Relation to Intraoperative Finding

● True pre-op localisation of solitary adenoma (TP)



## Preoperative Mibi-Scintigraphy in Relation to Intraoperative Finding

● (Tom)

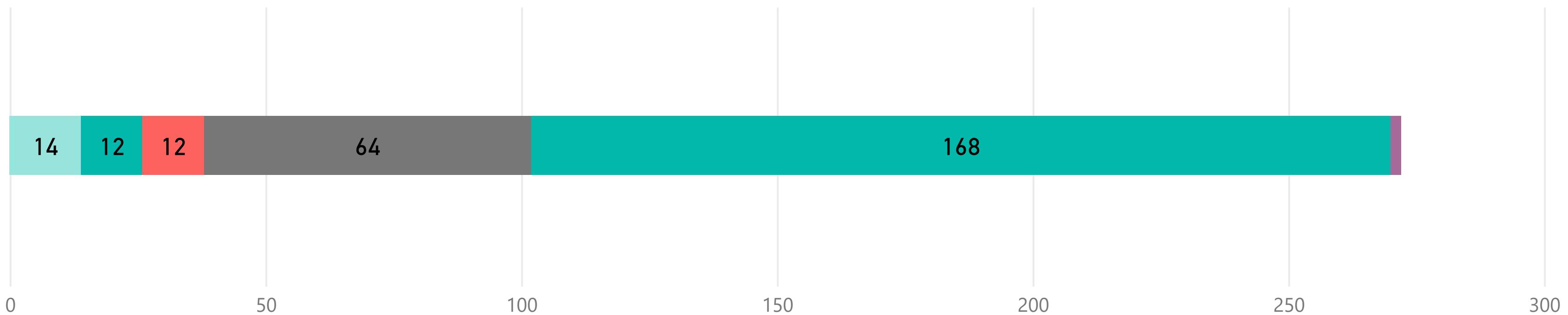
● Correct position of one pathological gland, but multiglandular disease ...

● False pre-op localisations of solitary adenoma (FP)

● Negative / inconclusive pre-op examination

● True pre-op localisation of solitary adenoma (TP)

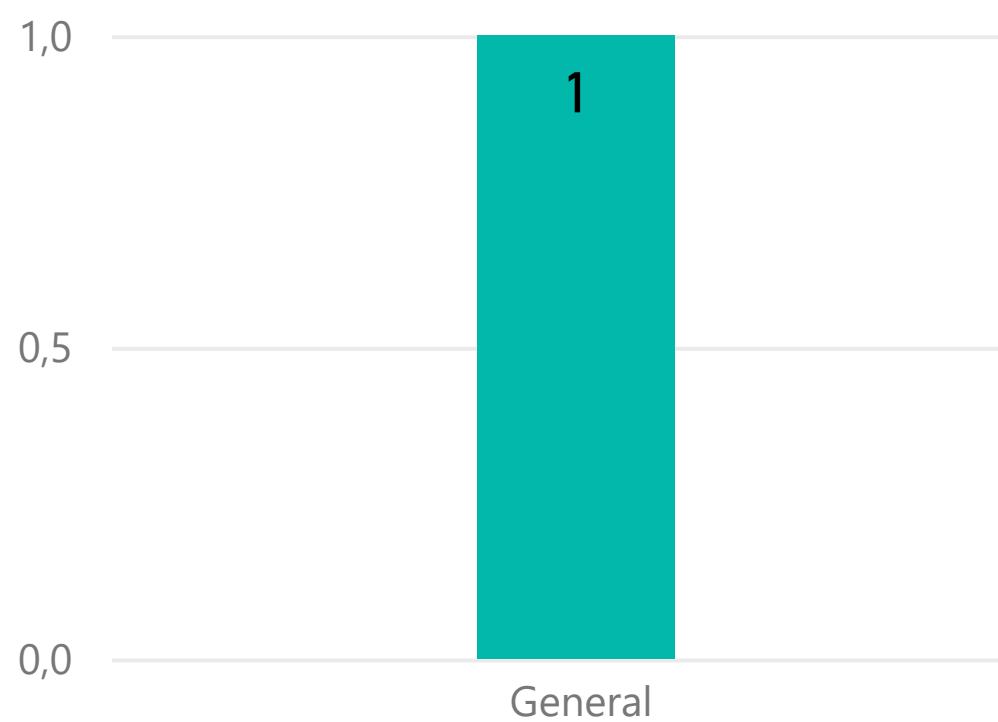
● True pre-op prediction of multiglandular disease



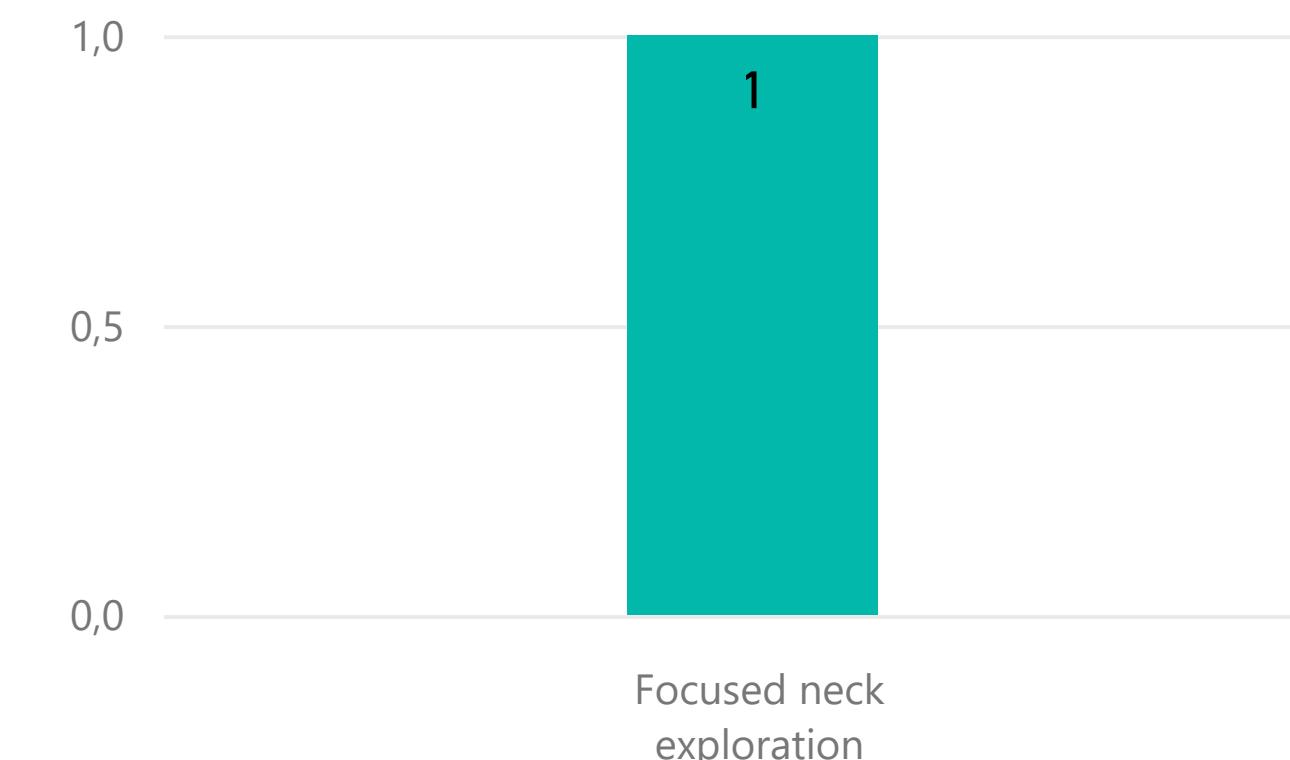
# Parathyroids

## Characteristics of Primary Operations, Sporadic Disease

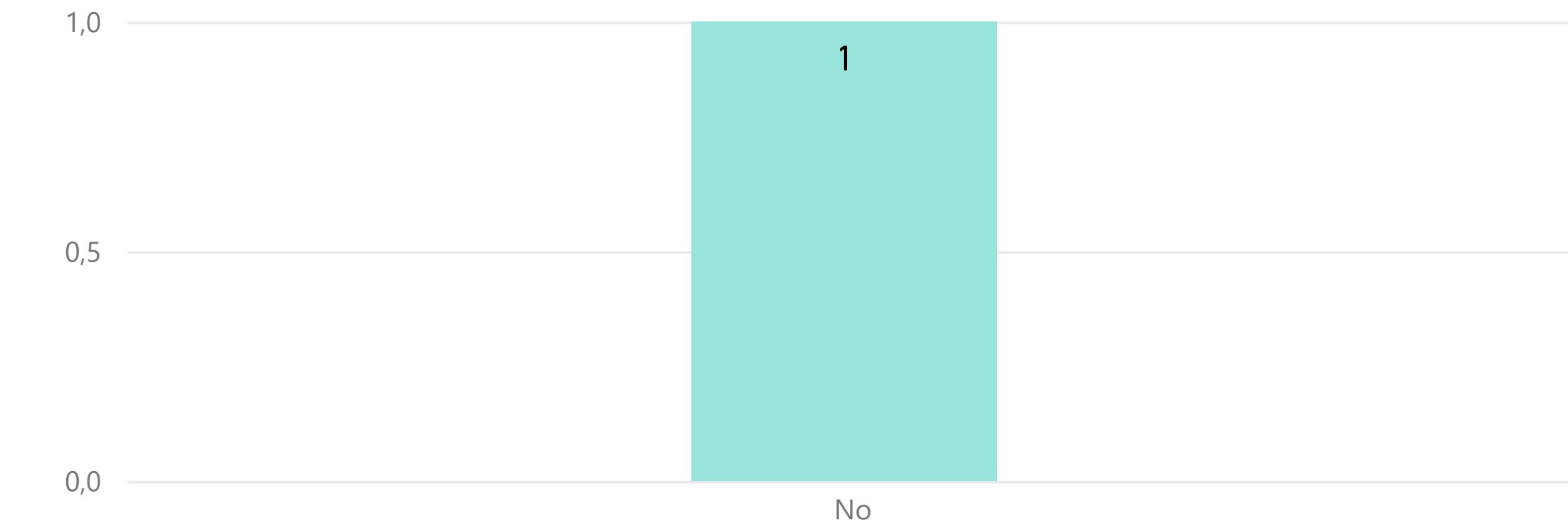
Type of Anesthesia



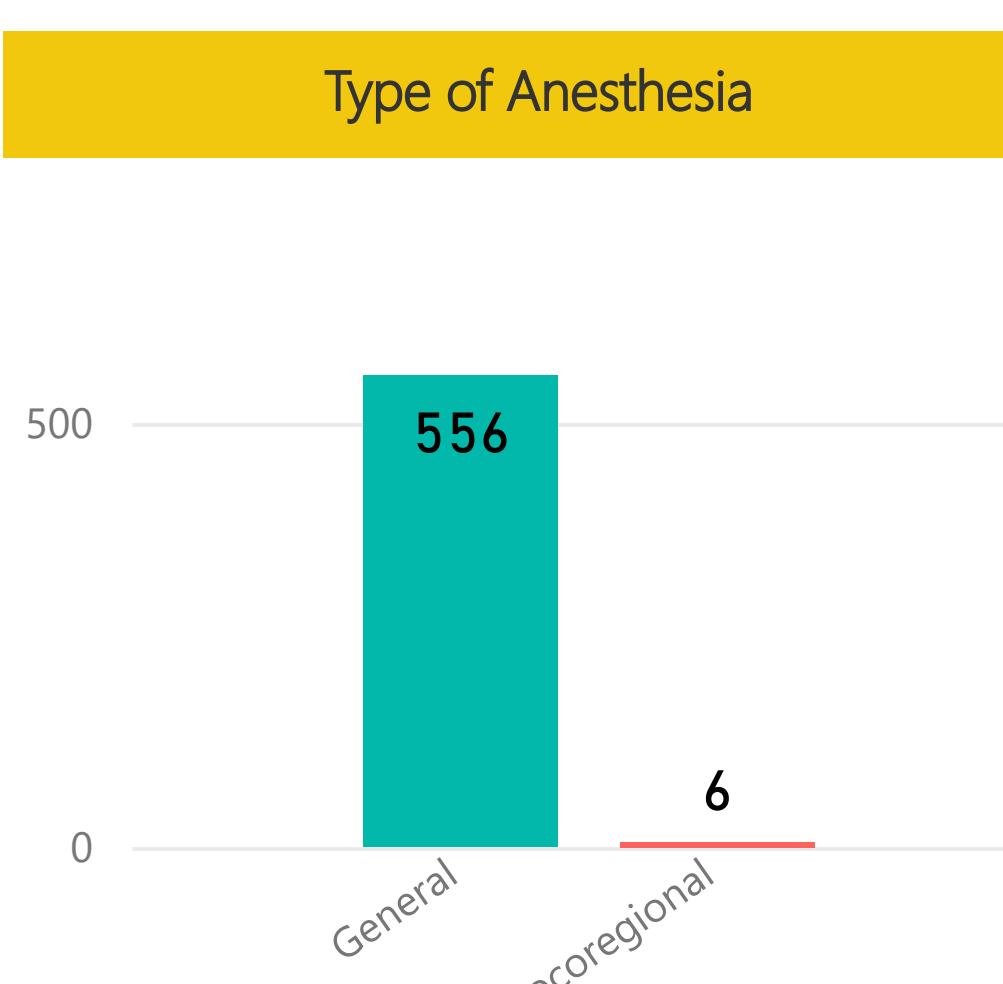
Type of Approach



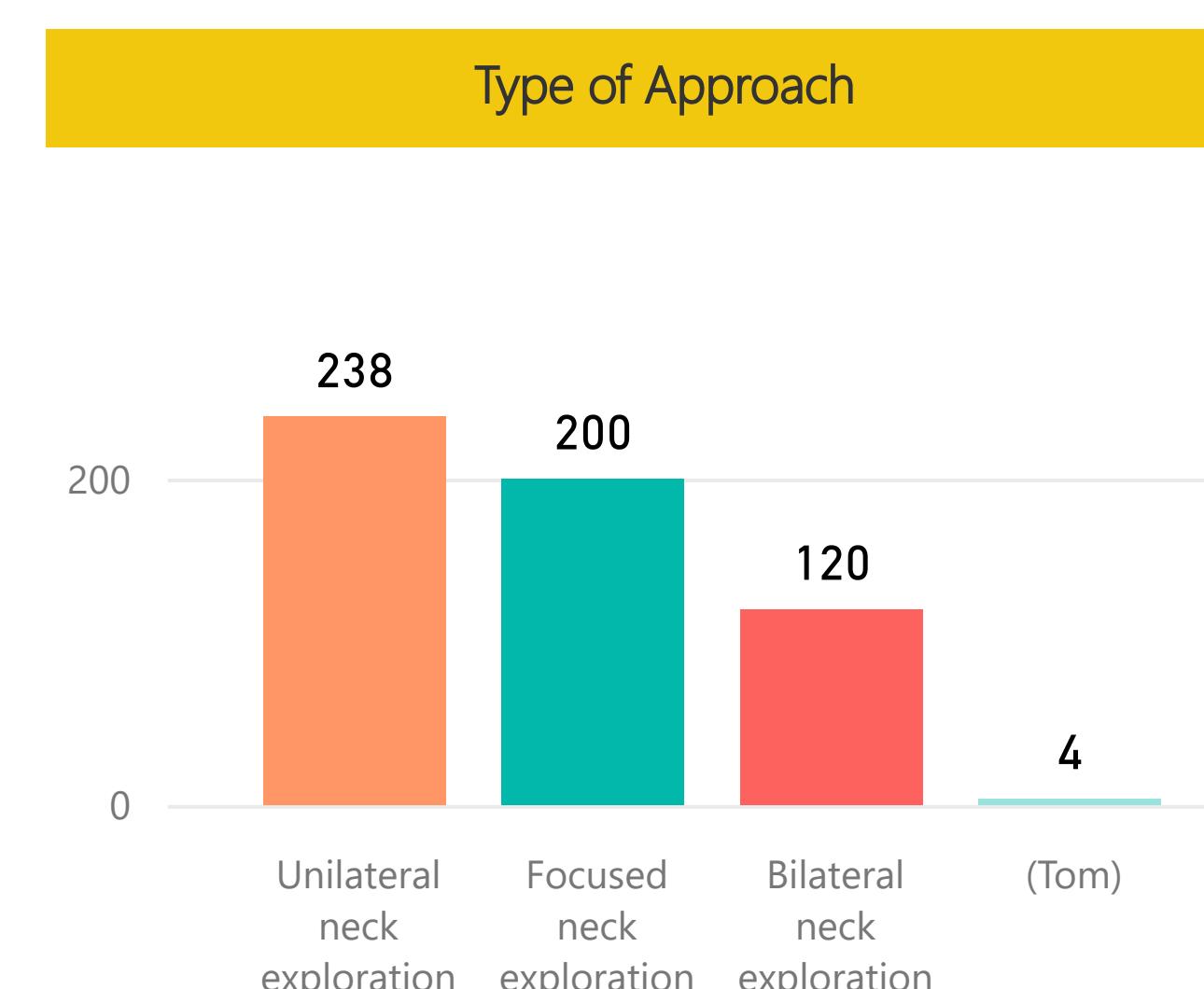
Concomitant Thyroid Resection



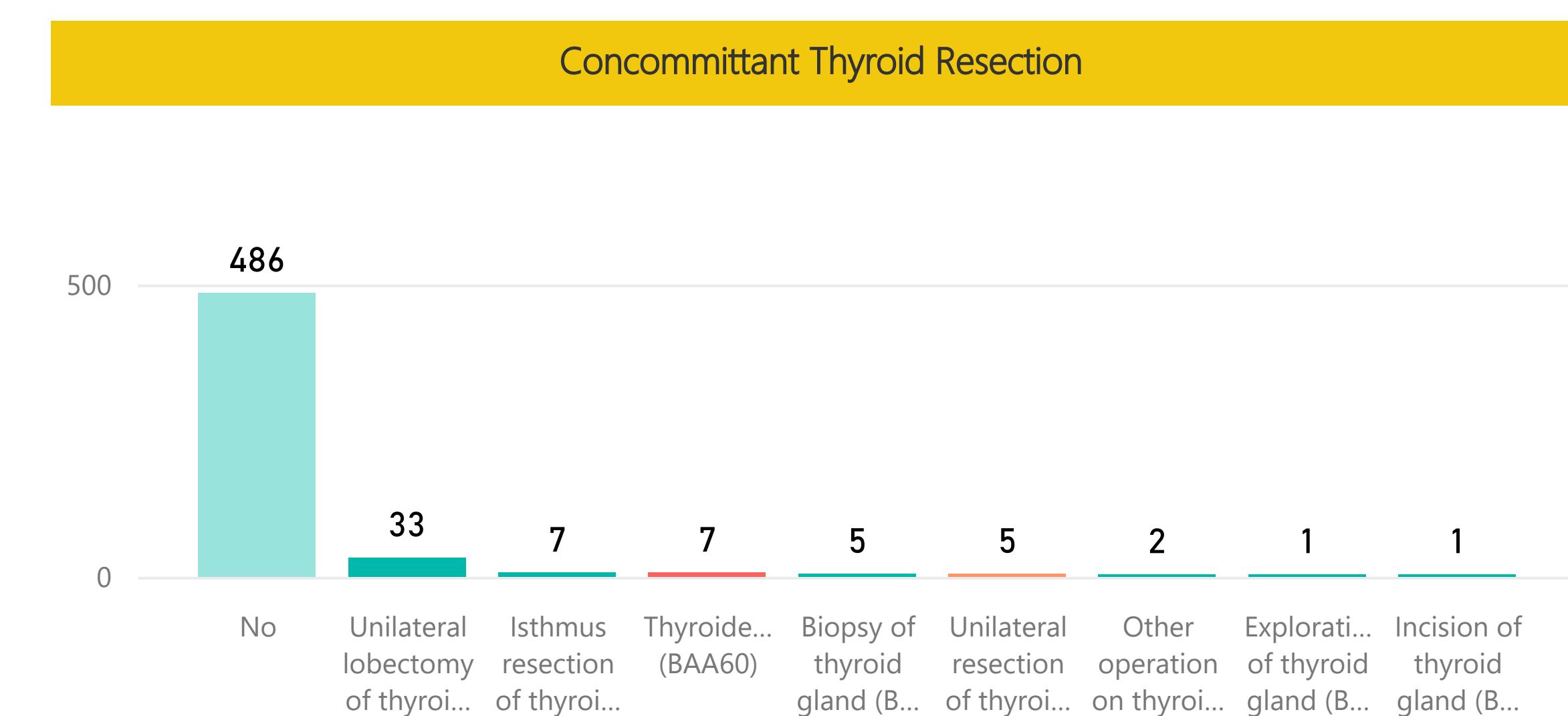
Type of Anesthesia



Type of Approach



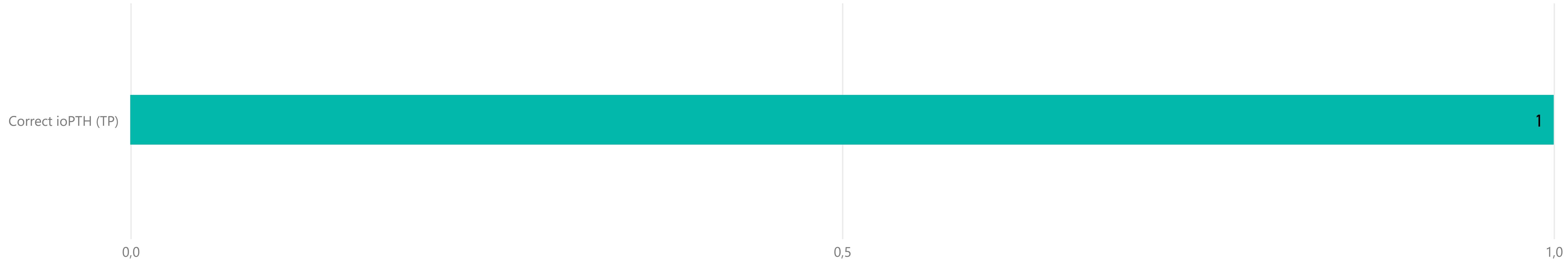
Concomitant Thyroid Resection



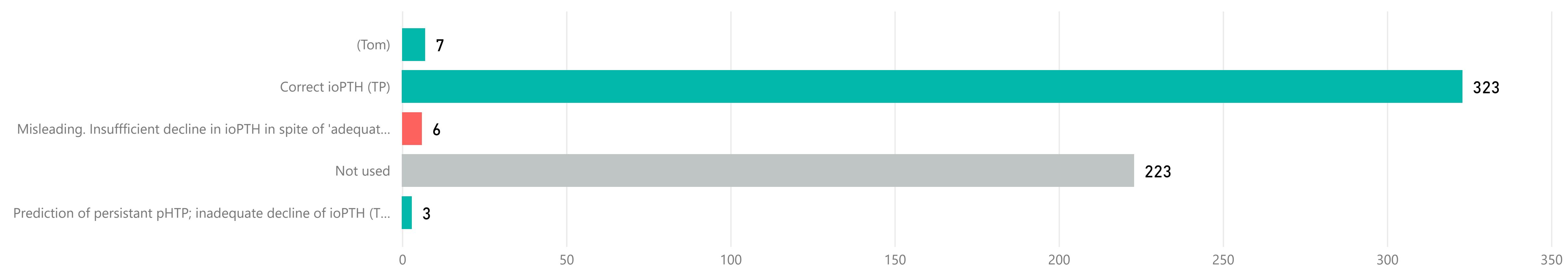
# Parathyroids

## Characteristics of Primary Operations for Sporadic pHTP: Results of PTH-Monitoring

PTH-Monitoring Results



PTH-Monitoring Results



# Parathyroids

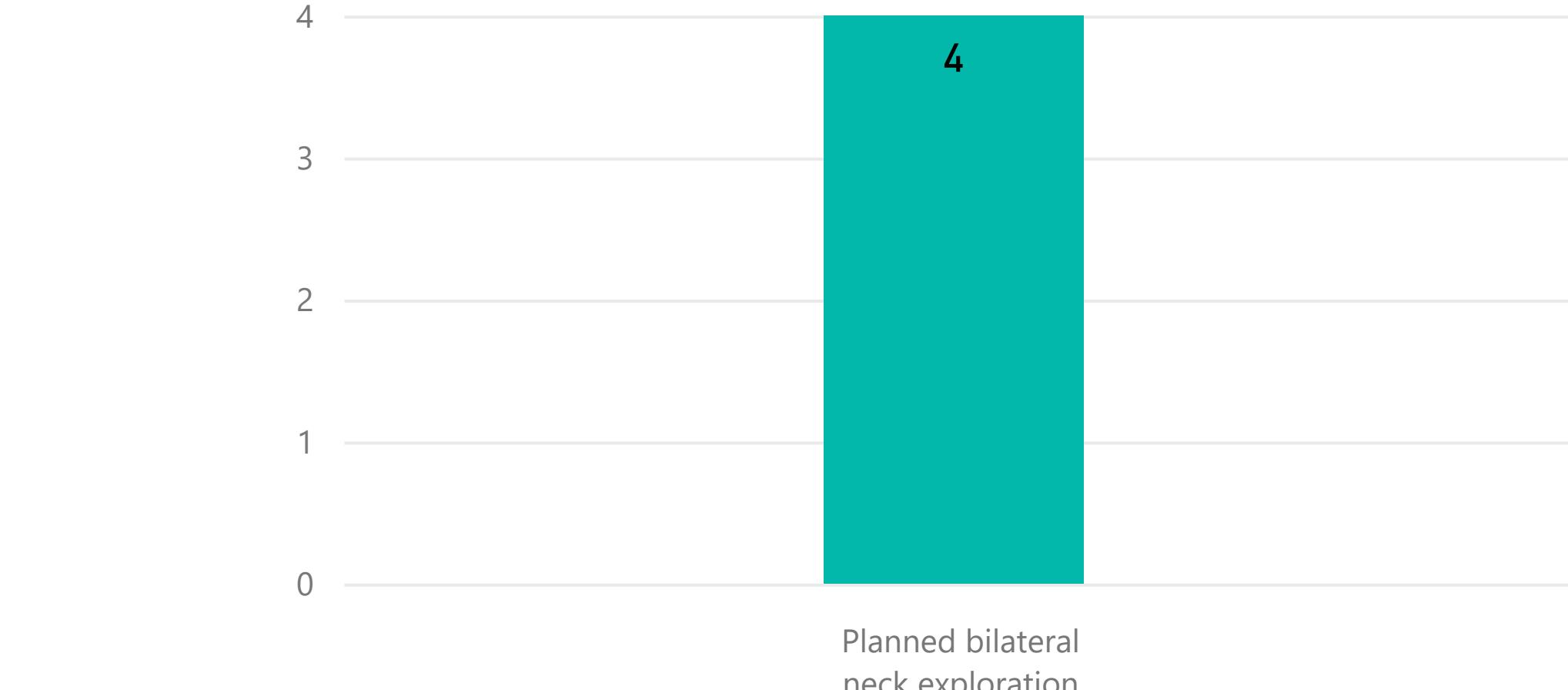
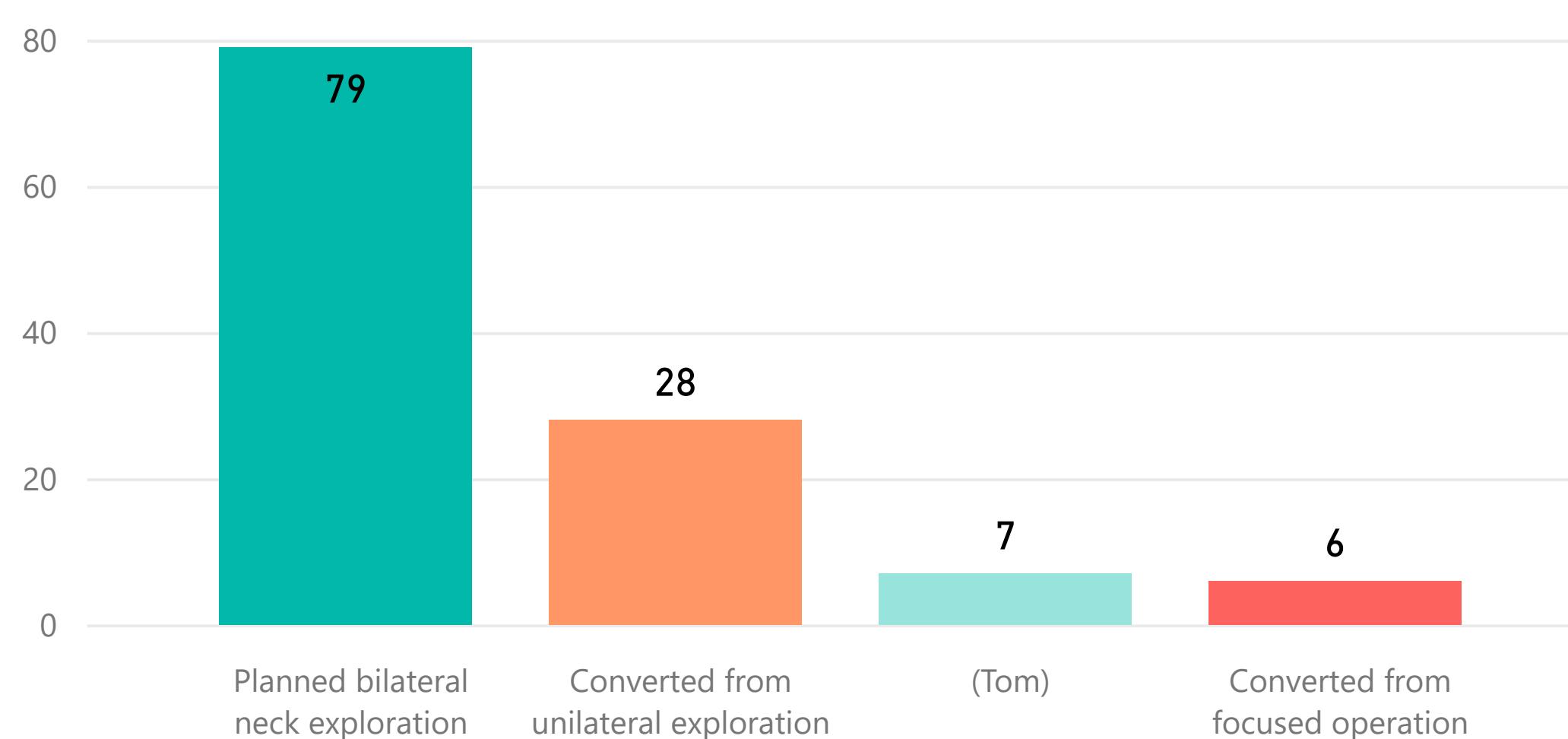
Characteristics of Bilateral Explorations in Sporadic and Hereditary Disease (Primary Operations)

Starting Point of Bilateral Explorations in Sporadic Disease

Starting Point of Bilateral Explorations in Hereditary Disease

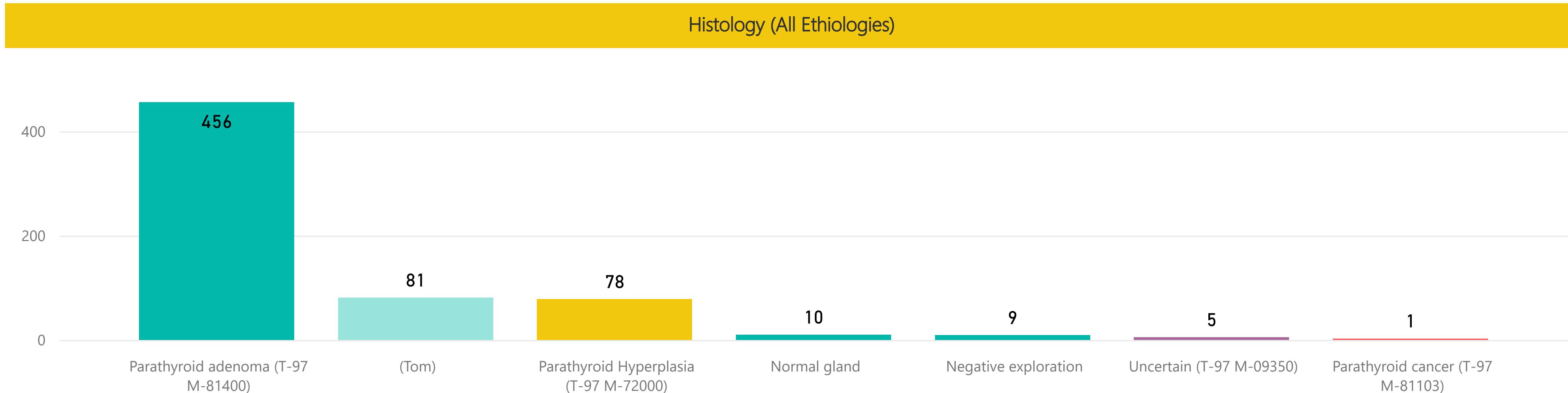
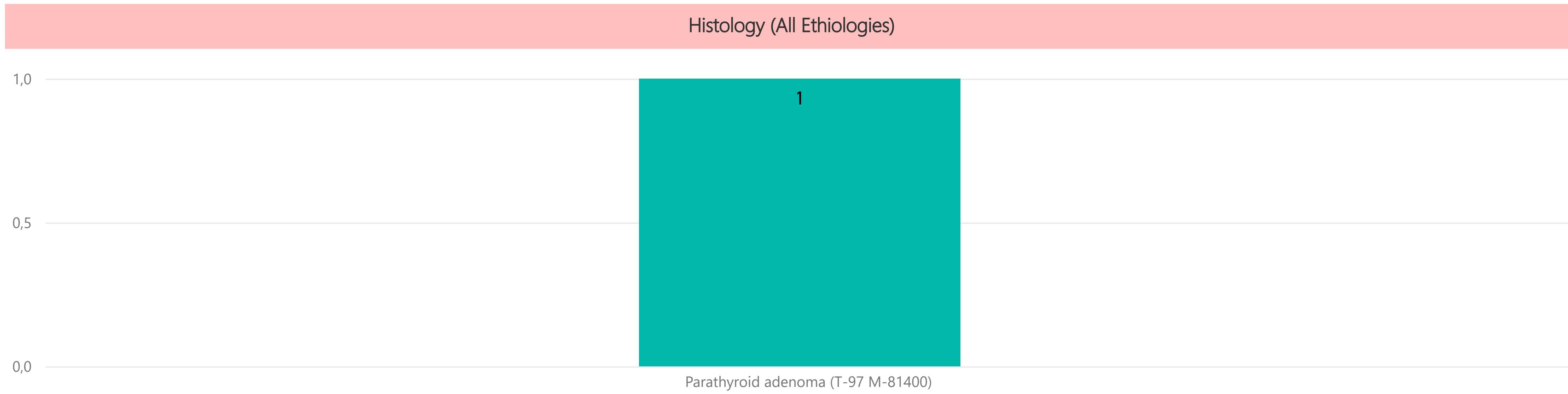
Starting Point of Bilateral Explorations in Sporadic Disease

Starting Point of Bilateral Explorations in Hereditary Disease



# Parathyroids

## Histopathology Results

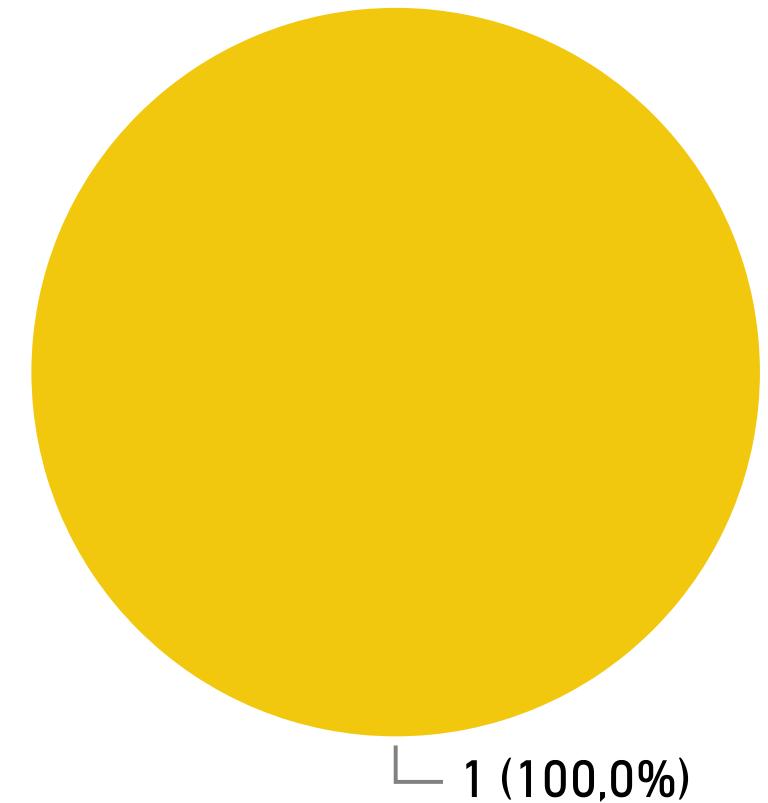


# Parathyroids

## Postoperative Laryngoscopy

### Postoperative Laryngoscopy

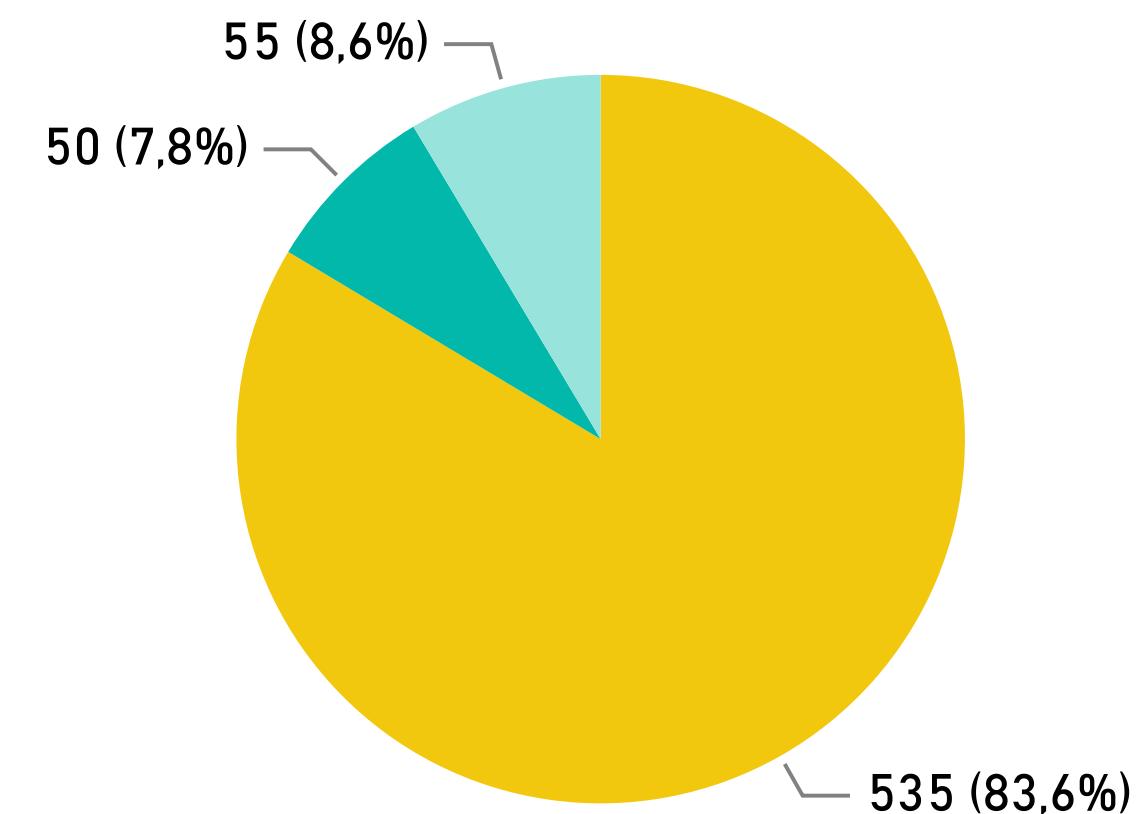
● Not performed



Postoperative Laryngoscopy	n	%
Not performed	1	100,00%
<b>Totalt</b>	<b>1</b>	<b>100,00%</b>

### Postoperative Laryngoscopy

● Not performed  
● Normal  
● (Tom)



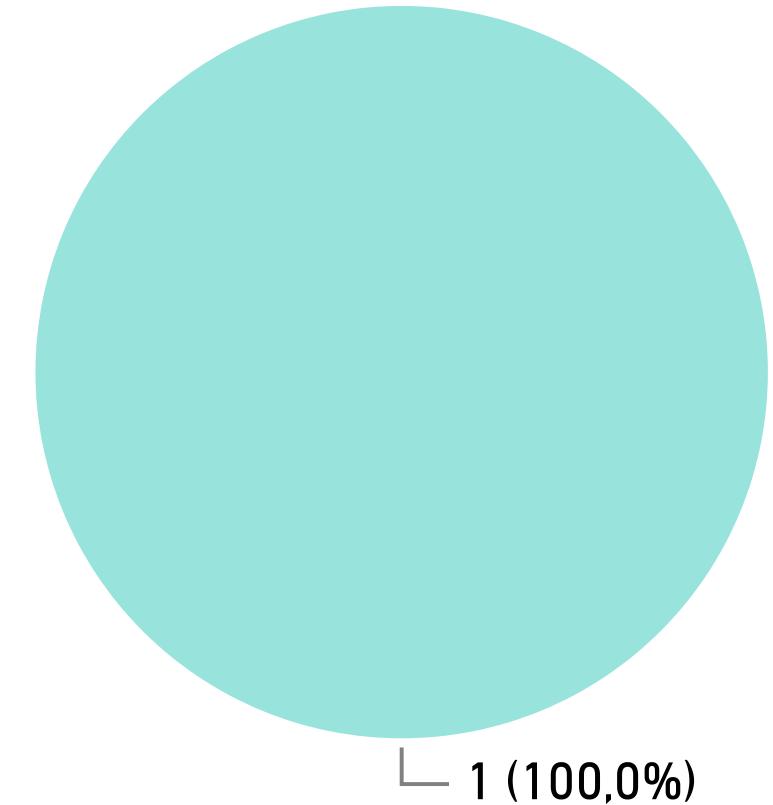
Postoperative Laryngoscopy	n	%
Not performed	55	8,59%
Normal	50	7,81%
Not performed	535	83,59%
<b>Totalt</b>	<b>640</b>	<b>100,00%</b>

# Parathyroids

## Laryngoscopy at Follow-up (F2)

### Laryngoscopy at Longterm Follow-up (F2)

(Tom)



Laryngoscopy at Follow-up	n	%
1	1	100,00%
<b>Totalt</b>	<b>1</b>	<b>100,00%</b>

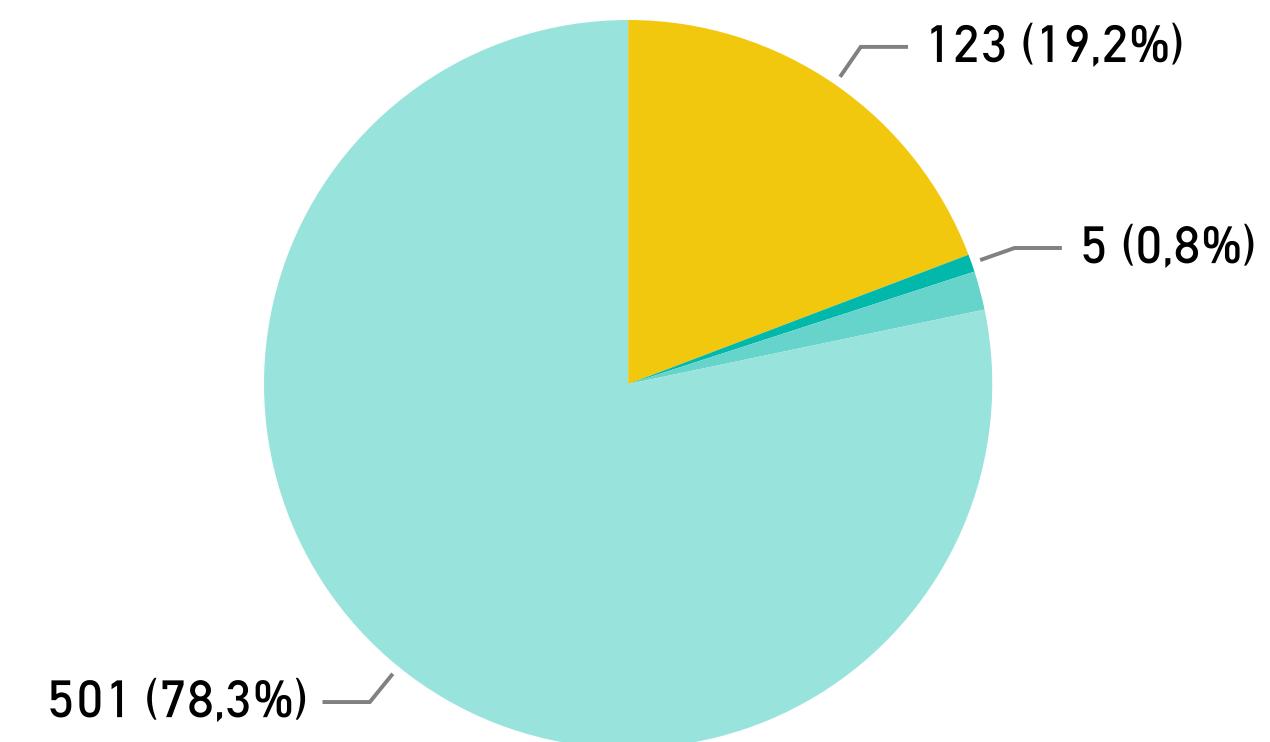
### Laryngoscopy at Longterm Follow-up (F2)

Not performed

Normal

No data available

(Tom)

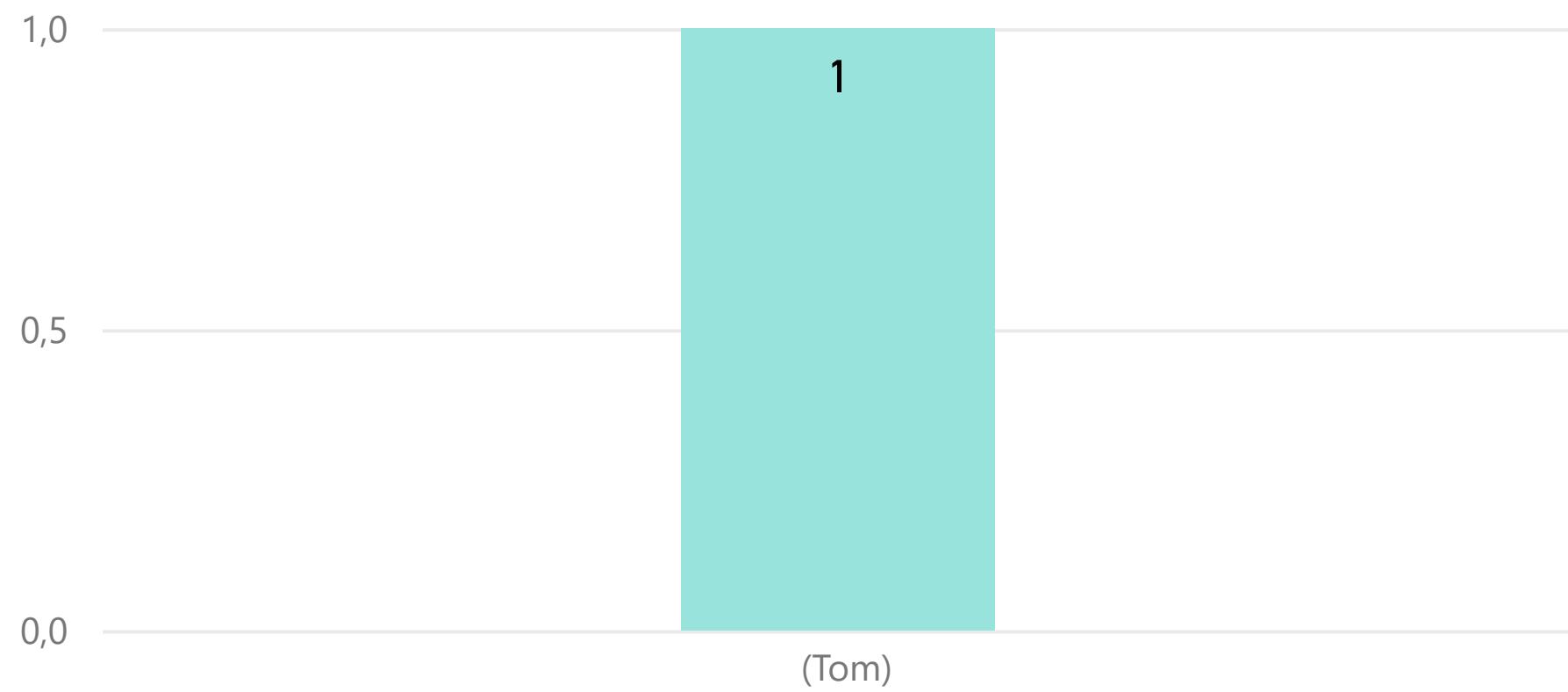


Laryngoscopy at Follow-up	n	%
Not performed	123	19,22%
Normal	5	0,78%
No data available	11	1,72%
Totalt	640	100,00%

# Parathyroids

## Follow-up Data

Calcium Status



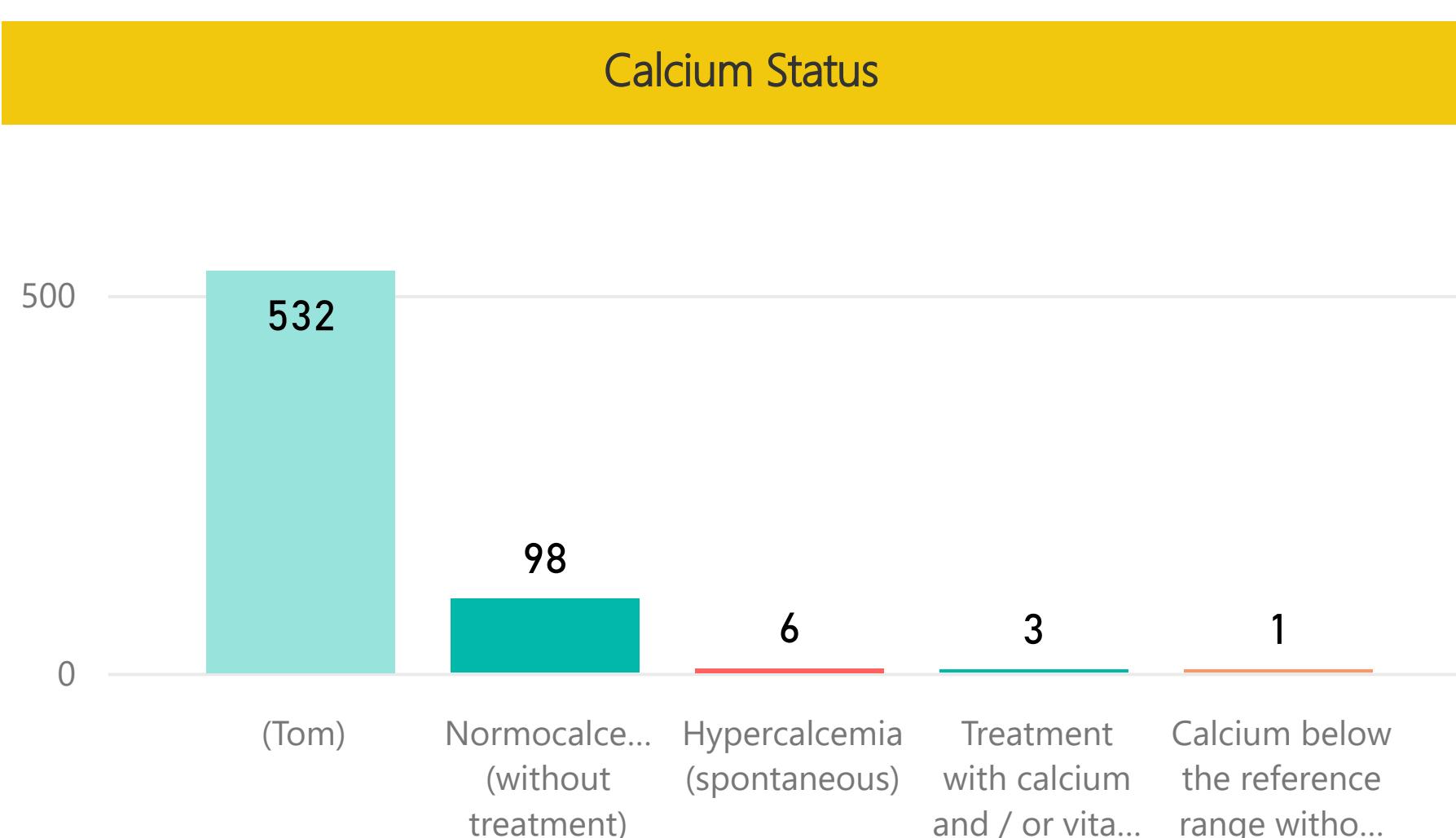
PTH Status of Normocalcemic Patients or Patients on Ca / Vit D



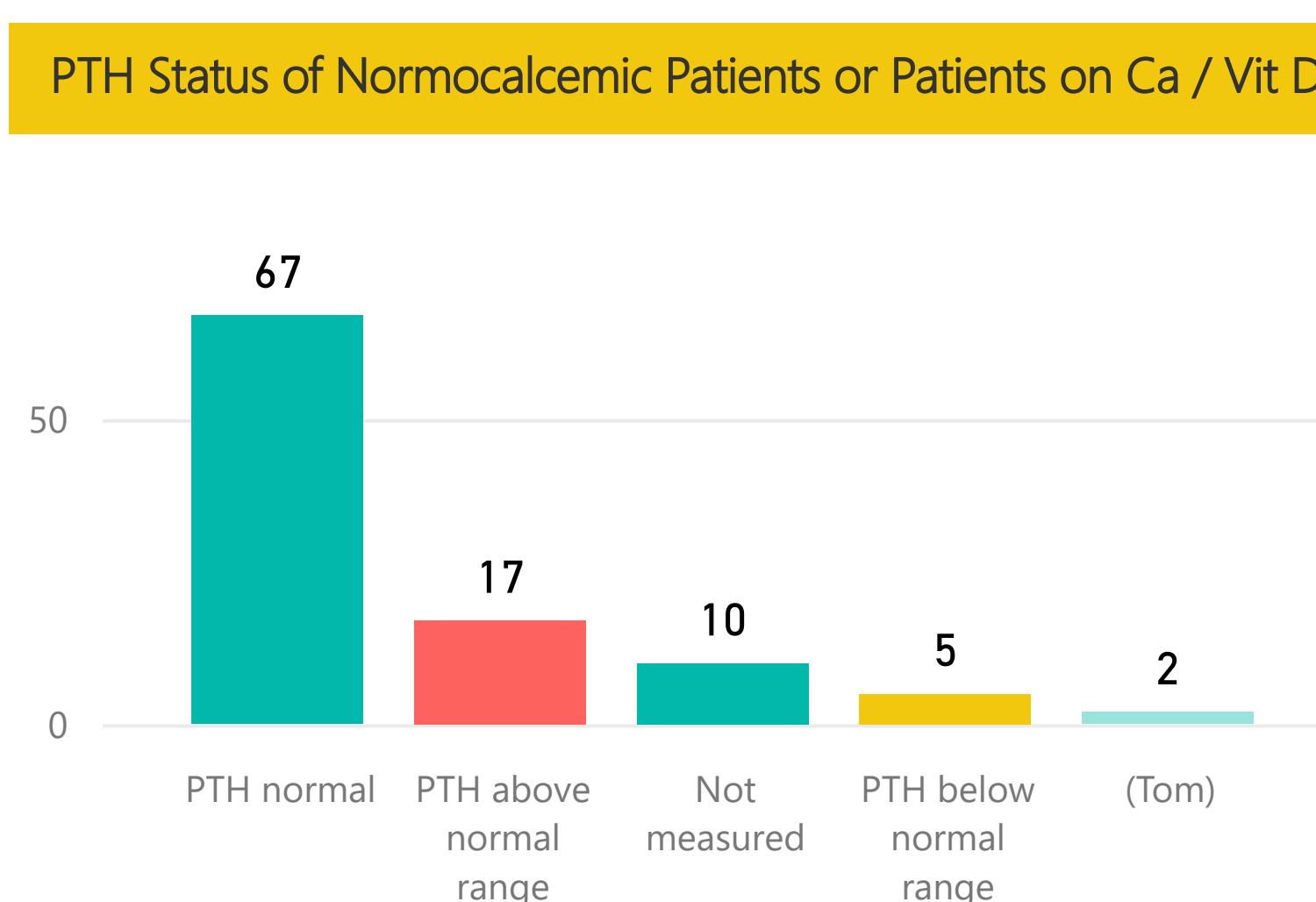
PTH Status of Hypercalcemic Patients



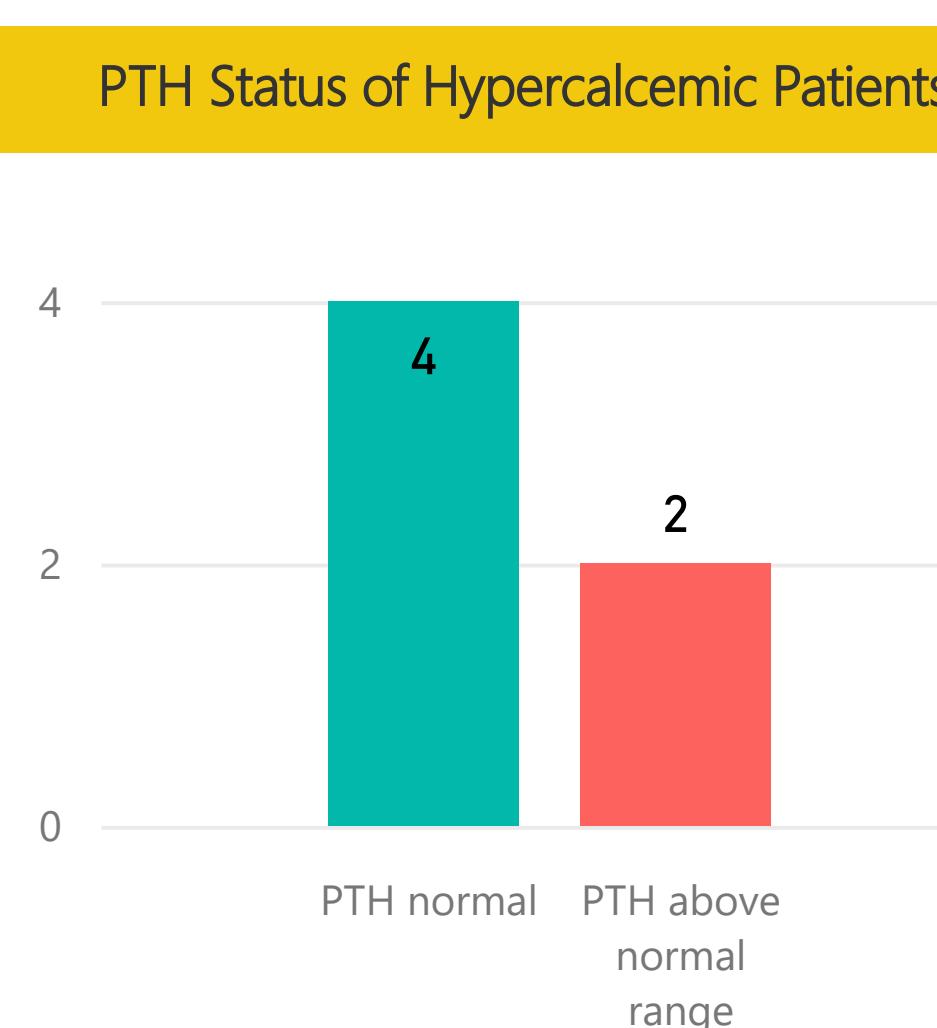
Calcium Status



PTH Status of Normocalcemic Patients or Patients on Ca / Vit D



PTH Status of Hypercalcemic Patients



# Parathyroids

Potentially Negative Explorations with Possible Disease Persistence based on Selected Type of Operation or Main Histological Diagnosis

based on Selected Type of Operation

Extrirpation of parathyroid gla...

1

0,0

0,5

1,0

based on Selected Histological Main Diagnosis

Parathyroid adenoma (T-9...

1

0,0

0,5

1,0

based on Selected Type of Operation

Extrirpation of parathyroid gla...

597

Subtotal parathyroidectomy (...

18

Exploration of parathyroid gl...

14

(Tom)

8

Other operation on parathy...

3

0

200

400

600

based on Selected Histological Main Diagnosis

Parathyroid adenoma (T-9...

456

(Tom)

81

Parathyroid Hyperplasia (T...

78

Normal gland

10

Negative exploration

9

Uncertain (T-97 M-09350)

5

Parathyroid cancer (T-97 ...

1

0

200

400

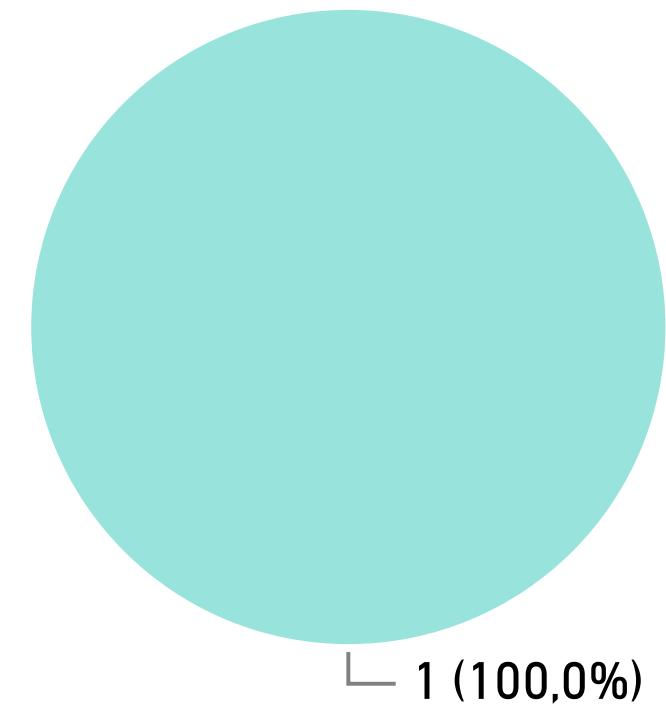
# Parathyroids

## Persistences and Re-Operations

Histological Main Diagnosis in Patients with Persistent Hypercalcemia at Follow-up

Patients Reoperated for Persistence at Follow-up

(Tom)



Histological Main Diagnosis in Patients with Persistent Hypercalcemia at Follow-up

Patients Reoperated for Persistence at Follow-up

