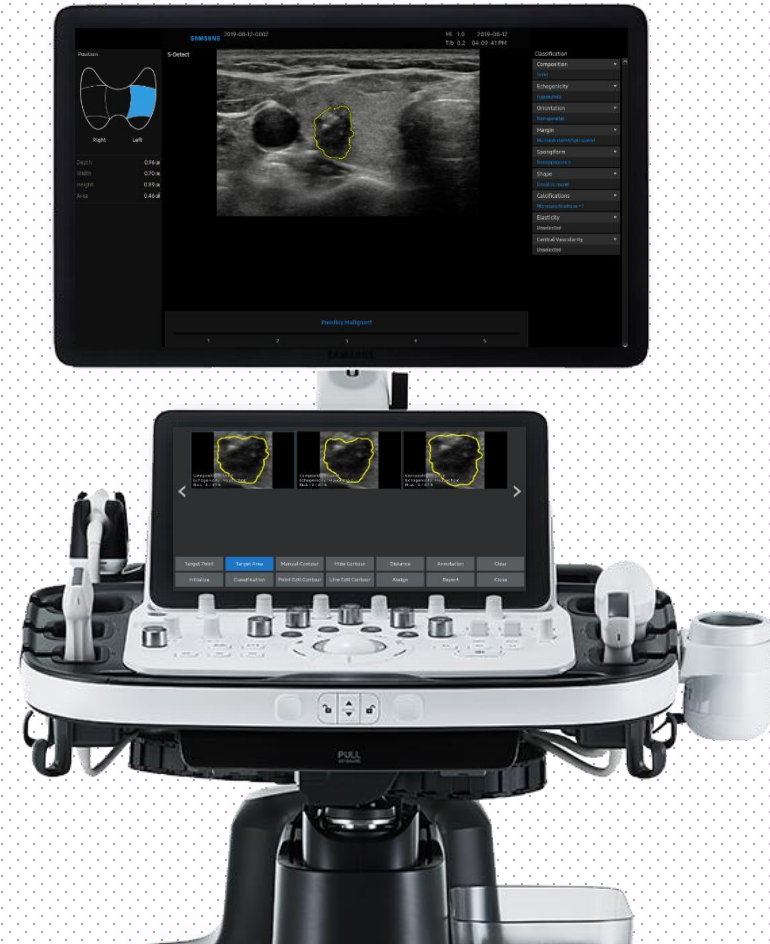
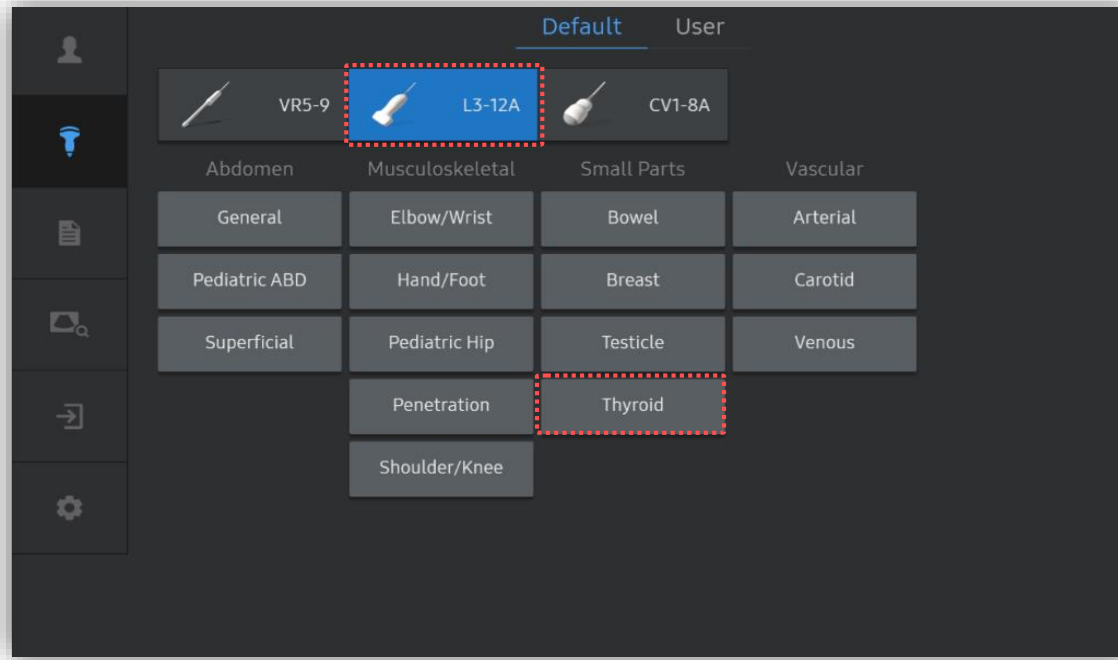


## S-Detect™ *for Thyroid*

### HERA W10 Quick Guide



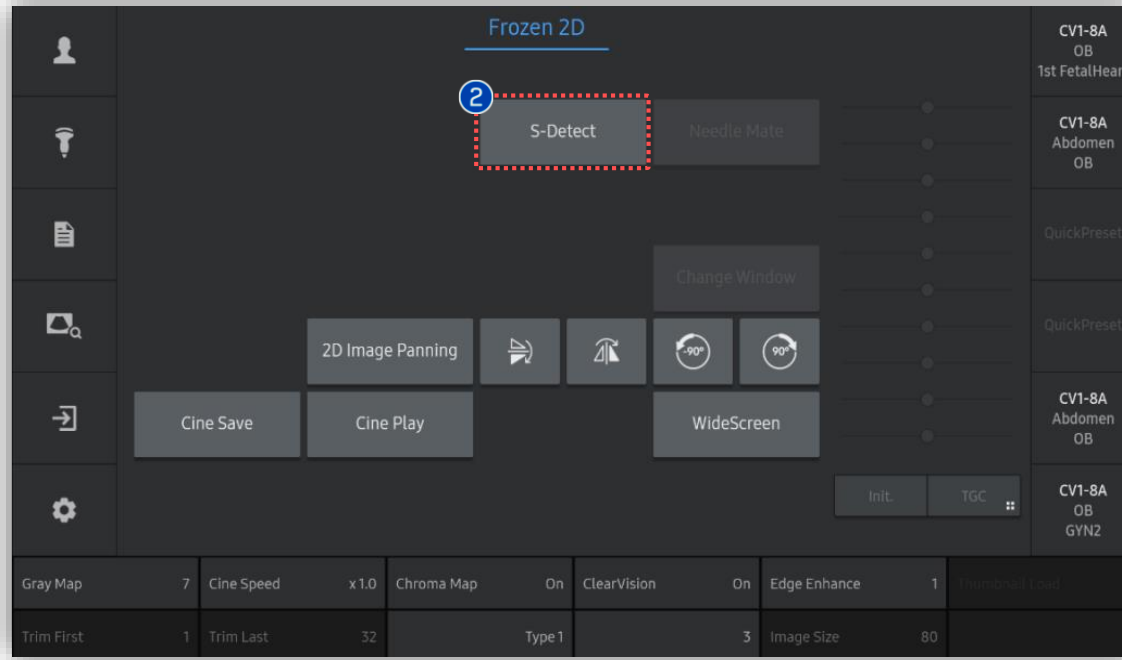
# 1. Probe and Preset



※ S-Detect for Thyroid™ can be operated under the following conditions :

Probe	Application
L3-12A LA2-9A LA2-14A LA4-18B	Small Parts (Thyroid)

## 2. Start S-Detect™ for Thyroid



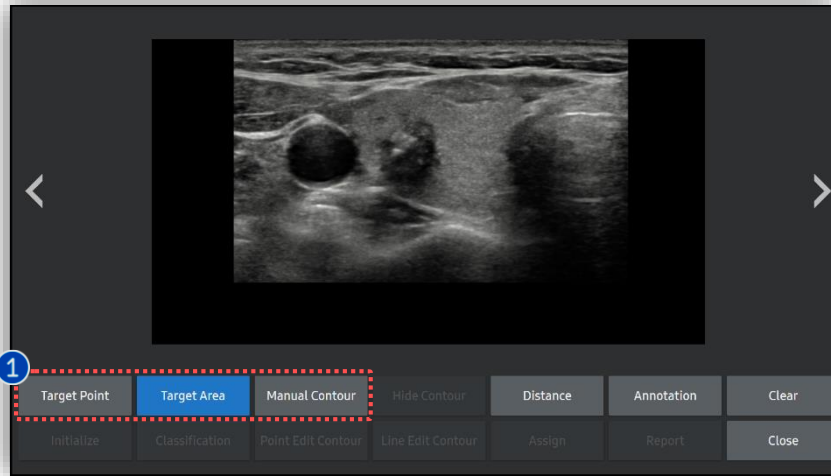
### ① Image Acquisition

Acquire the image of the lesion in 2D mode and press the [Freeze] button.

### ② Start S-Detect

Tap [S-Detect] on the touch screen.

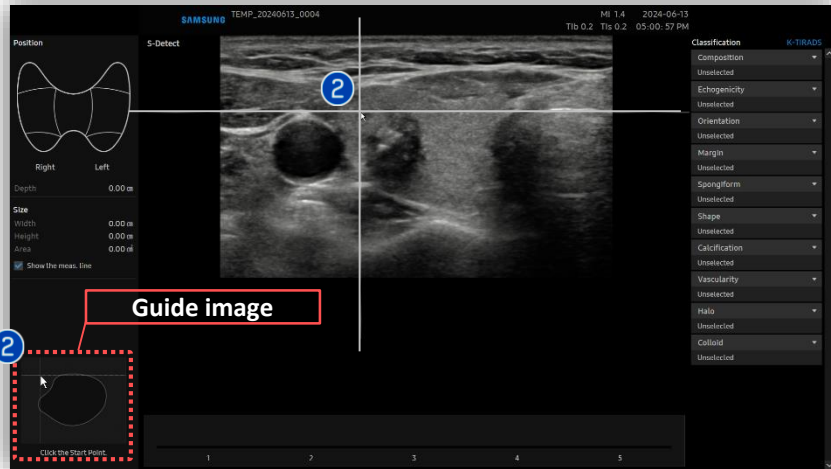
## 3. Designate the ROI (1)



[ Touch Screen ]

### 1 Detection method

- Target Point
- Target Area (Default mode)
- Manual Contour



[ Monitor Screen ]

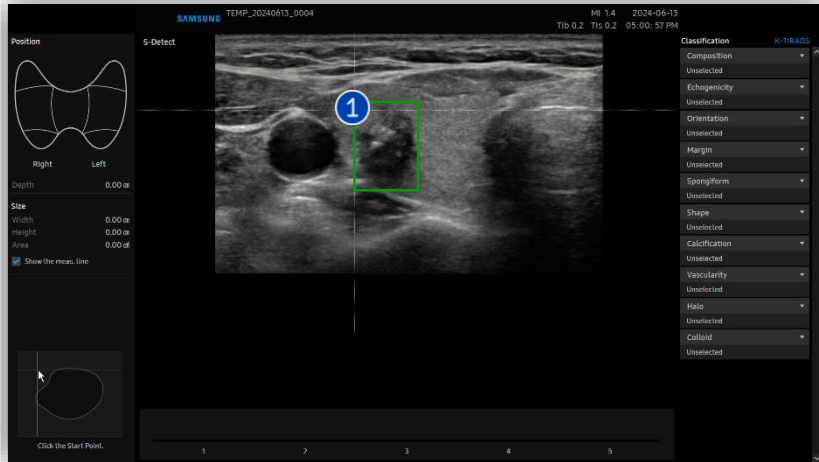
### 2 Draw the ROI

When [Target Area] is selected, two guide lines will appear.

The guide image tells you how to designate the area enclosing a suspicious mass.

Press the [Set] button to start drawing the ROI from the upper left corner of lesion.

## 3. Designate the ROI (2)



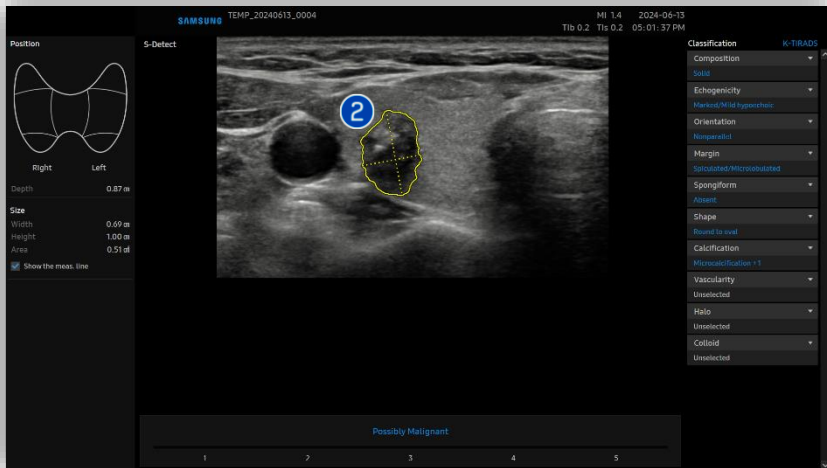
[ Monitor Screen ]

① Draw the ROI

Adjust the guidelines to make the rectangle overlap the boundaries of suspected lesion and click [Set] button to finish.

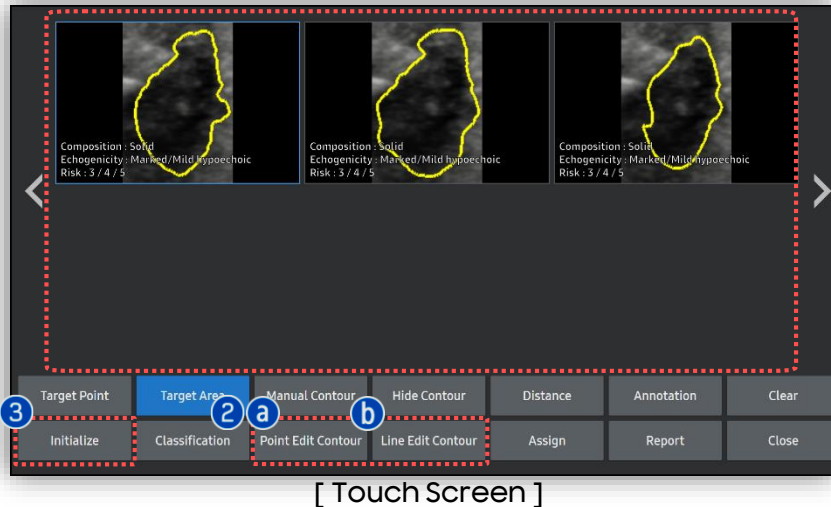
② Detected boundary

After drawing the ROI, lesion boundary is automatically detected and is displayed in yellow contour.



[ Monitor Screen ]

## 4. Select the Candidates and Edit



### 1 Candidates

Available candidate images are provided (up to 6) on the touch screen so that you can choose most suitable image.

### 2 Edit Contour

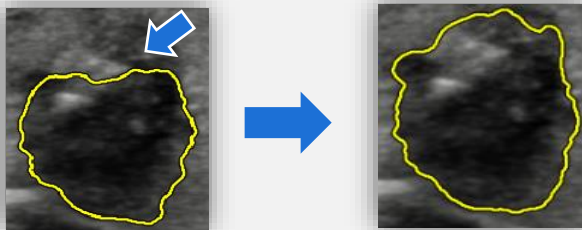
If necessary, you can edit the contour of selected candidate by [Point Edit contour] or [Line Edit contour] on the touch screen.

### 3 Initialize

To reset all results and re-specify, tap [Initialize] button on the touch screen.

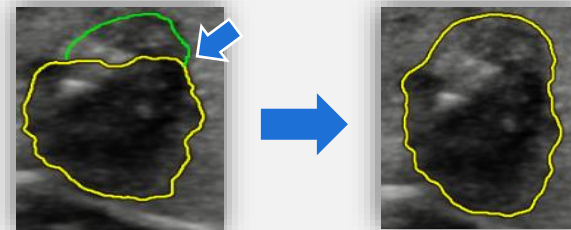
#### a Point Edit contour

Locate the cursor close to the part of contour that you want to modify and then press [Set] button.

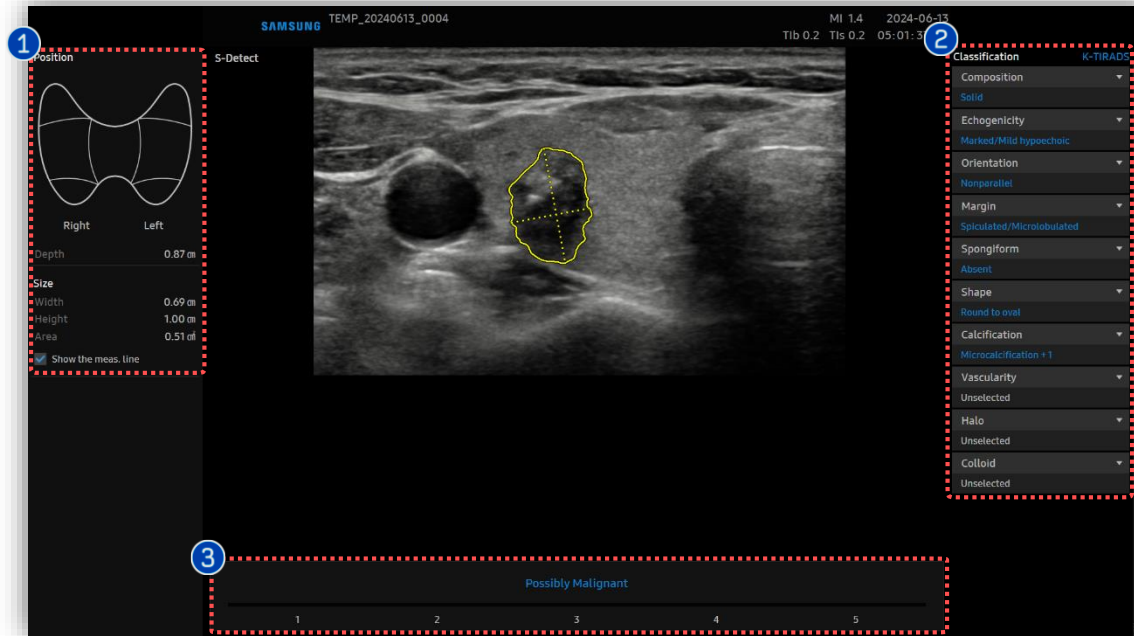


#### b Line Edit contour

Draw the new boundary (green color) manually using the trackball and press the [Set] button.



# 5. Result Page



① Location Information Area	Provides information about the location and size of the lesion.
② Classification	Provides the TIRADS Lexicon Classification of the lesion.
③ Description	S-Detect only suggests whether the lesion tends to be malignant or benign.

## 6. Result Page: Mark the Position

The screenshot displays the S-Detect for Thyroid interface. On the left, a thyroid body marker is shown with a blue shaded area indicating the lesion's position. The interface is divided into two main sections: 'Position' and 'Size'. The 'Position' section shows a diagram of the thyroid gland with a blue shaded area on the right side. The 'Size' section displays the following measurements: Depth 0.84 cm, Width 0.62 cm, Height 1.04 cm, and Area 0.48 cm². A checkbox labeled 'Show the meas. line' is checked. The main display area shows an ultrasound image of the thyroid gland with a yellow dashed line marking the lesion. The 'S-Detect' label is visible above the image. The right side of the interface shows a 'Classification' panel with various parameters and their values, including Composition (Solid), Echogenicity (Marked/Mild hypoechoic), Orientation (Nonparallel), Margin (Spiculated/Microlobulated), Spongiform (Absent), Shape (Round to oval), Calcification (Microcalcification +1), Vascularity (Unselected), Halo (Unselected), and Colloid (Unselected). The bottom of the screen shows a navigation bar with five buttons, and the text 'Possibly Malignant' is displayed below the image.

**1 Position**

Right Left

Depth 0.84 cm

**2 Size**

Width 0.62 cm

Height 1.04 cm

Area 0.48 cm<sup>2</sup>

Show the meas. line

S-Detect

Classification K-TIRADS

Composition Solid

Echogenicity Marked/Mild hypoechoic

Orientation Nonparallel

Margin Spiculated/Microlobulated

Spongiform Absent

Shape Round to oval

Calcification Microcalcification +1

Vascularity Unselected

Halo Unselected

Colloid Unselected

Possibly Malignant

**1** Position

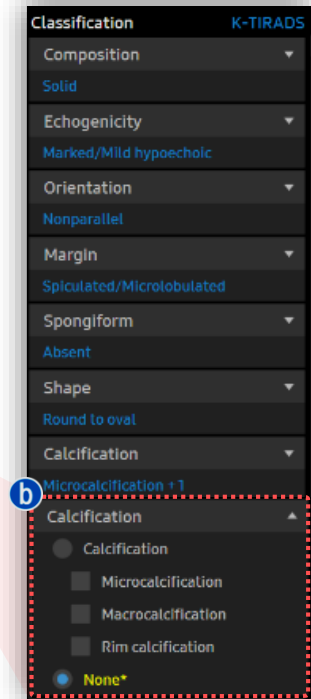
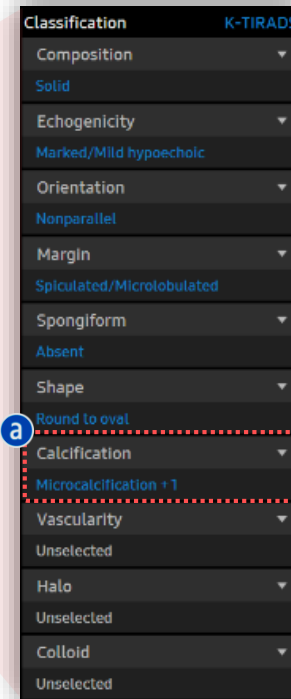
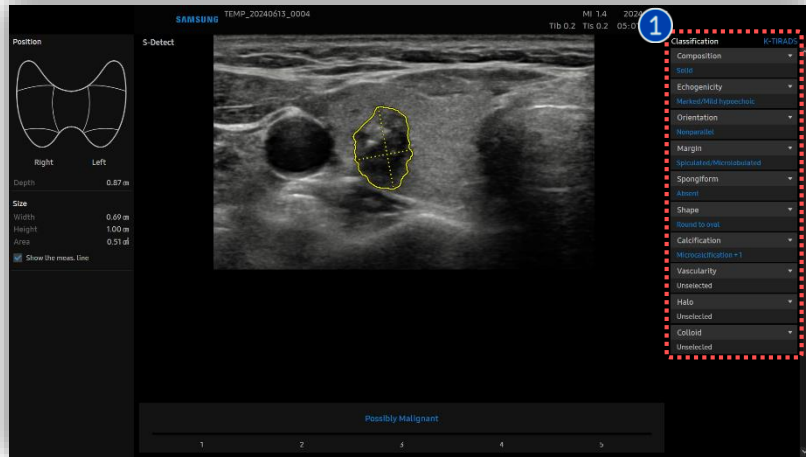
Select the location of the lesion on the thyroid body marker and press the [Set] button.

**2** Information of lesion

Depth, Width, Height and Area are automatically displayed.



# 7. Result Page: Edit the Classification (1)



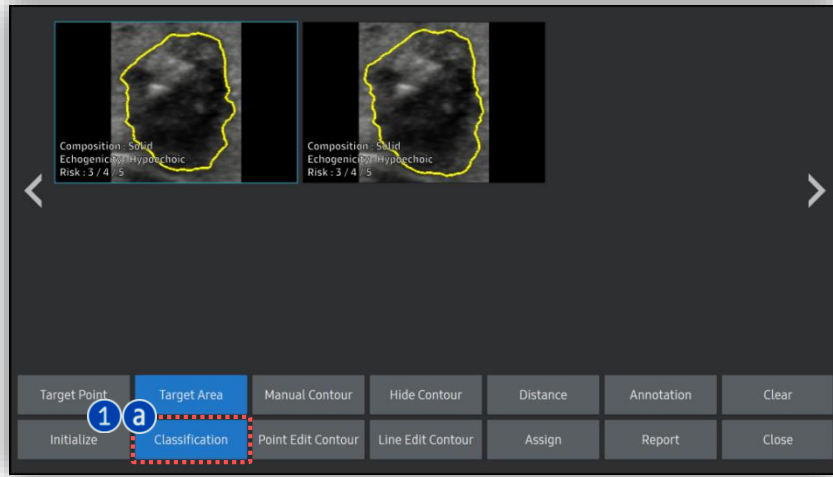
## ★ Tips

7 Classifications (blue color) are automatically provided.  
3 Classifications (white color) are 'Unselected', so it can be selected manually by users.

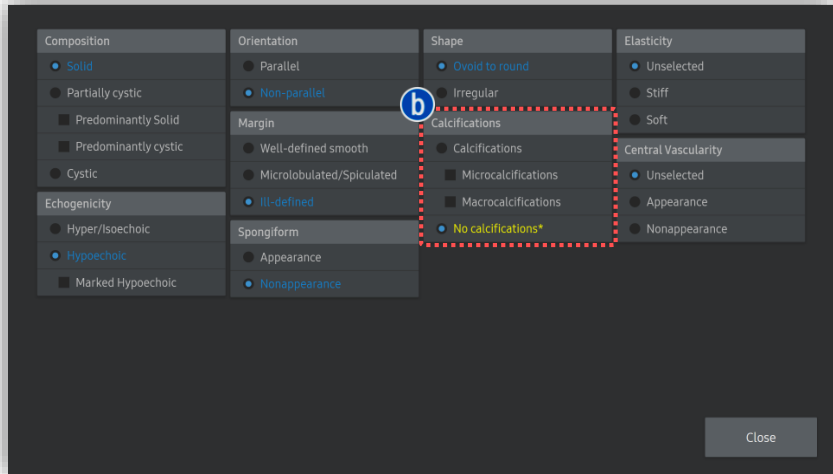
① Classifications

- a Click the title of classification that you want to modify.
- b Edit the result. Modified Classification is presented in yellow color.

# 7. Result Page: Edit the Classification (2)



[ Touch Screen ]



[ Touch Screen ]

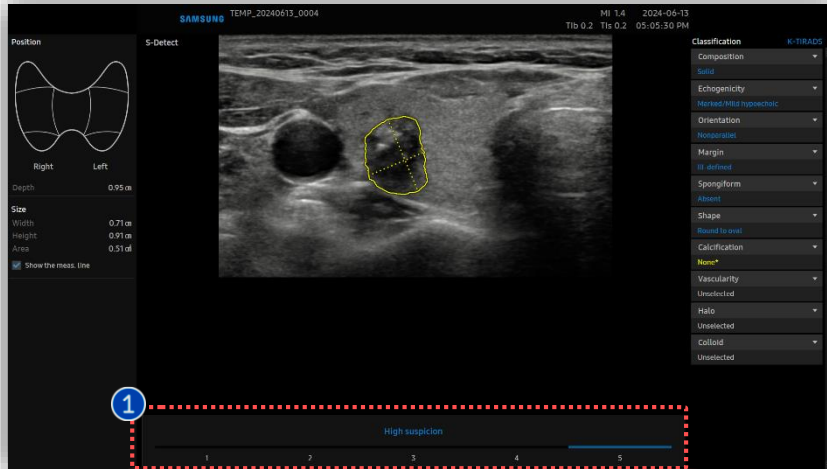
## 1 Classifications

a Tap the [Classification] button on the touch screen.

b Edit the result.

Modified Classification is presented in yellow color.

## 8. Result Page: Description and Score



① TIRADS score

Designate the specific TIRADS Assessment score (1 ~ 5) on the bottom of the screen to make the final diagnosis.

High suspicion

1

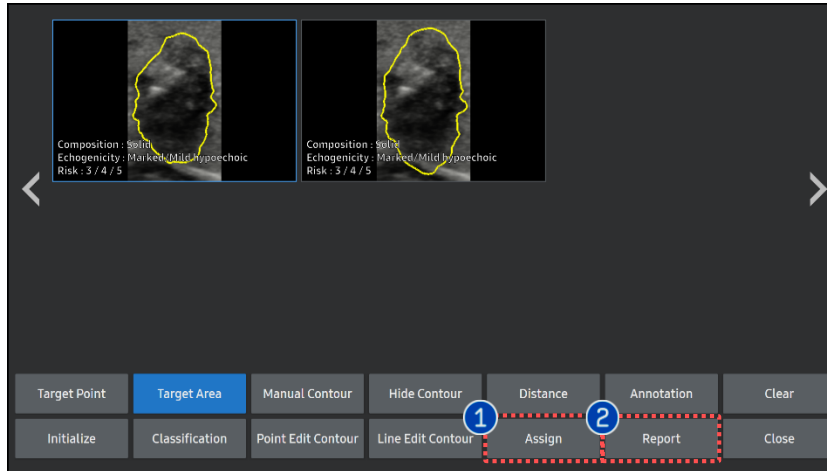
2

3

4

5

# 9. Assign to Report



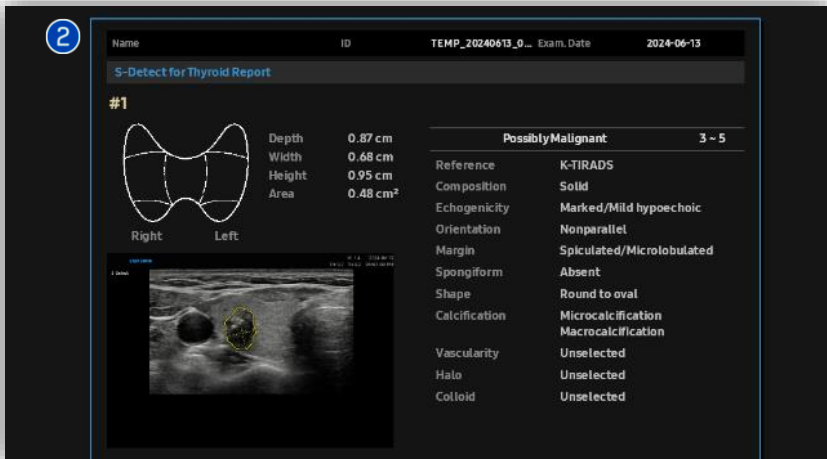
[ Touch Screen ]

① Assign

If you want to add the S-Detect results to the report, tap [Assign] button on the touch screen.

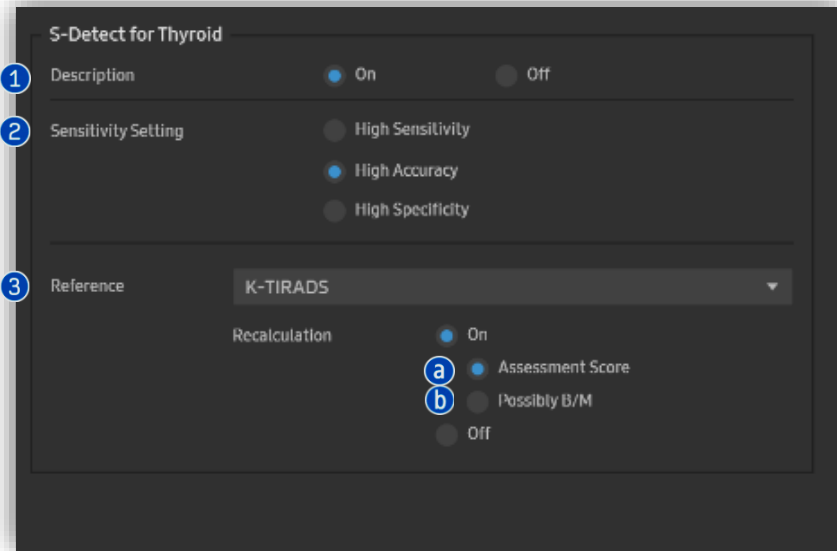
② Report

Tap the [Report] button on the touch screen to review the result of S-Detect.



[ Monitor Screen ]

## \* Appendix – Setup



## ★ Tips

You can edit the settings for S-detect in the Setup page.  
 Utility → Setup → Imaging → S-Detect → S-detect for  
 Thyroid

① Description	Turn on or off the description on the result page.
② Sensitivity Setting	Select the sensitivity of S-detect.
③ Reference	Select the reference system, among 'K-TIRADS', 'EU-TIRADS', 'ATA', 'BTA' or 'ACR TI-RADS.'
④ Recalculation	<p>Select whether you want recalculation when there is an edit in the classification. When recalculation is on, you can select to calculate the assessment score or just show whether its possibly benign/malignant.</p> <ul style="list-style-type: none"> <li>ⓐ Assessment Score - Classifies the lesion with assessment score</li> <li>ⓑ Possibly B/M - Indicates whether the lesion is possibly benign or malignant</li> </ul>

- The features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons, their future availability cannot be guaranteed.
- Do not distribute this internal document to customers unless relevant regulatory and legal affairs officers approve such distribution.
- This product is a medical device, please read the user manual carefully before use.
- This document is provided to help you understand the feature.
- This User Quick Guide is based on HERA W10 V1.03.03d
- Disclaimer: Some Images in this content were obtained from other system.

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