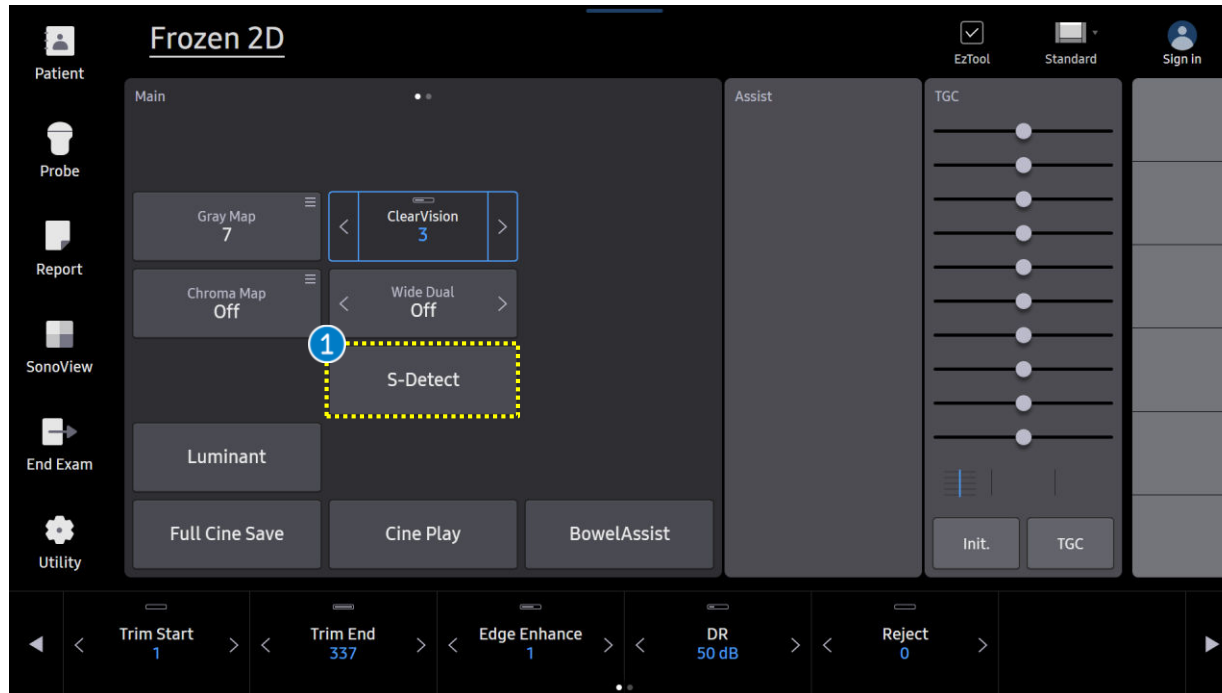


S-Detect™ for Thyroid

R20 Quick Guide



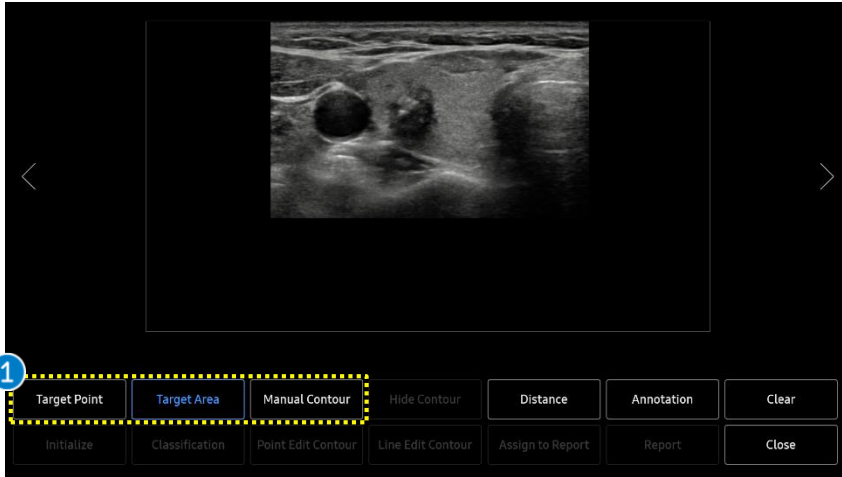
1. Start S-Detect™ for Thyroid



1 Start S-Detect

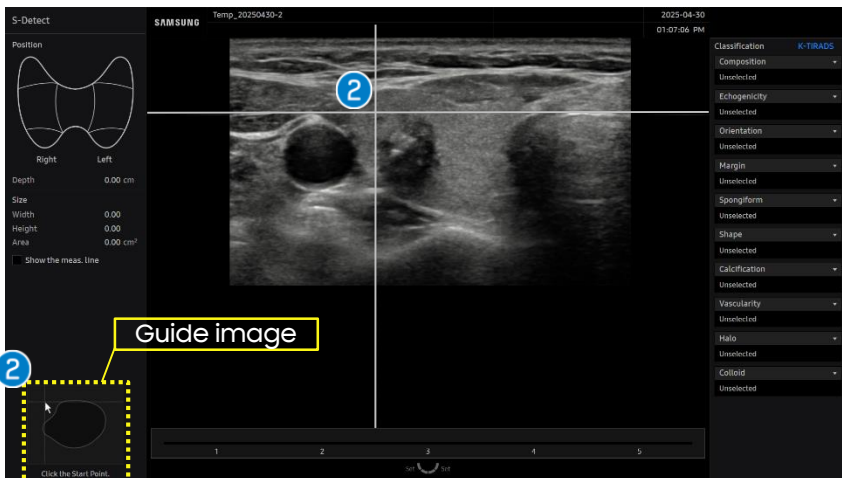
Tap [S-Detect] on the touch screen.

2. Designate the ROI (1)



1 Detection method

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



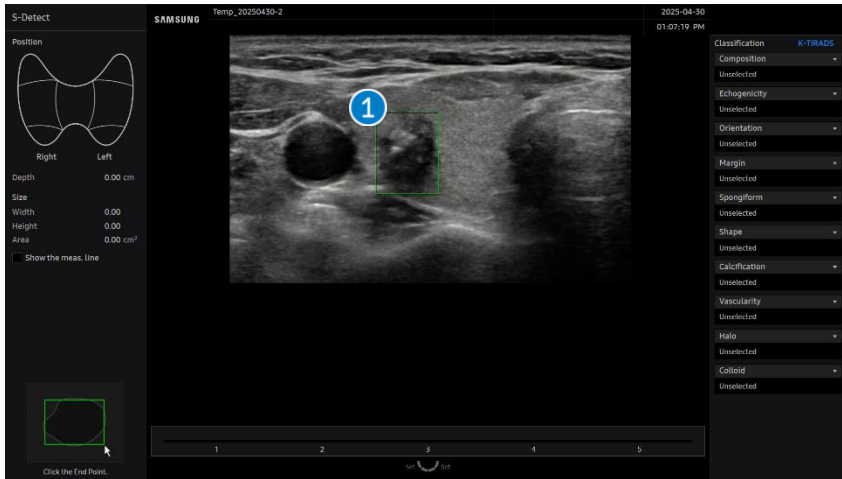
2 Draw the ROI

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

A 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 side of the lesion.

2. Designate the ROI (2)

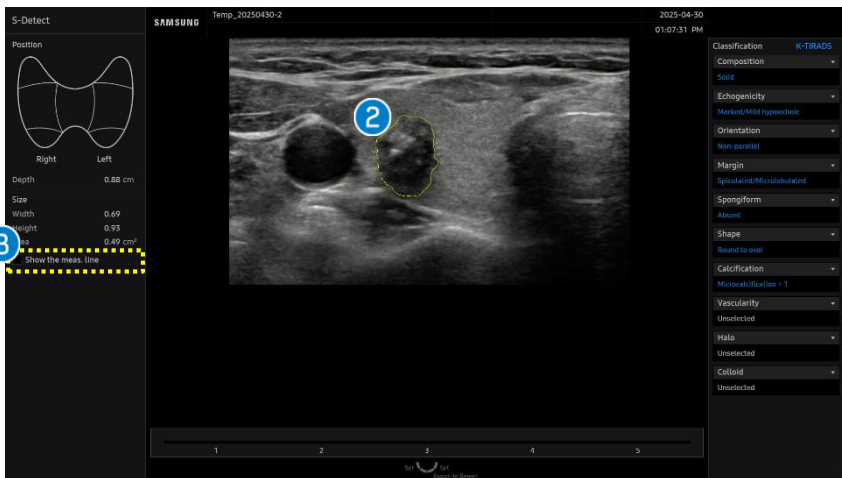


1 Draw the ROI

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

2 Detected boundary

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



3 Show the meas. line

It is to display the measurement (width and height) of the lesion.



3. Select the Candidate and Edit



1 Candidates

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

2 Edit Contour

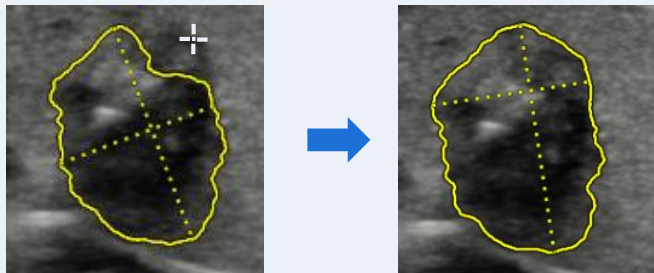
If necessary, you can edit the contour of the selected candidate with [Point Edit Contour] or [Line Edit Contour] on the touch screen.

3 Initialize

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

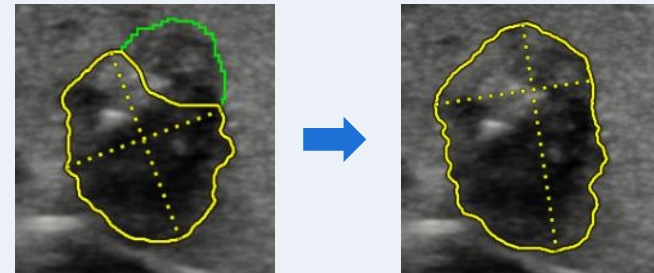
a Point Edit contour

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

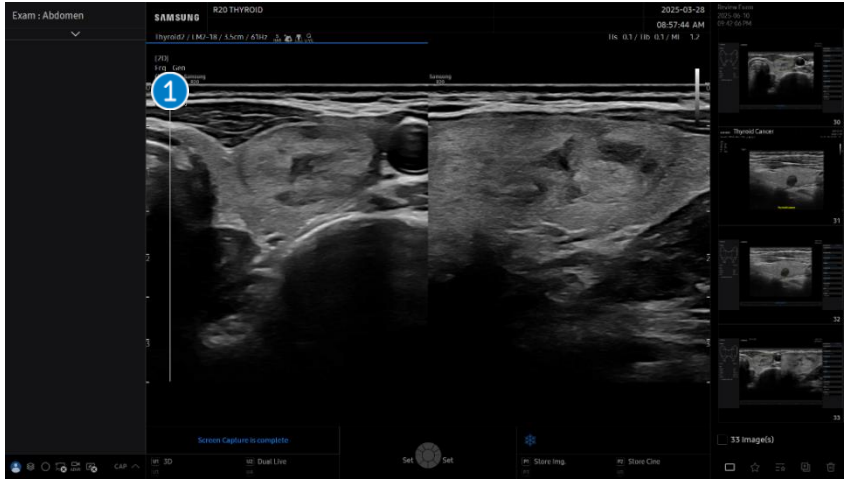


b Line Edit contour

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



4. Dual - Volume Measurement (1)

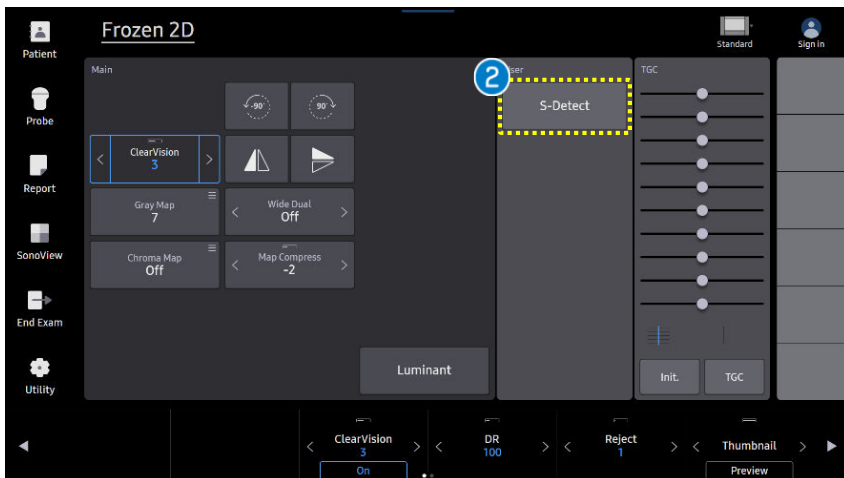


1 Dual scan

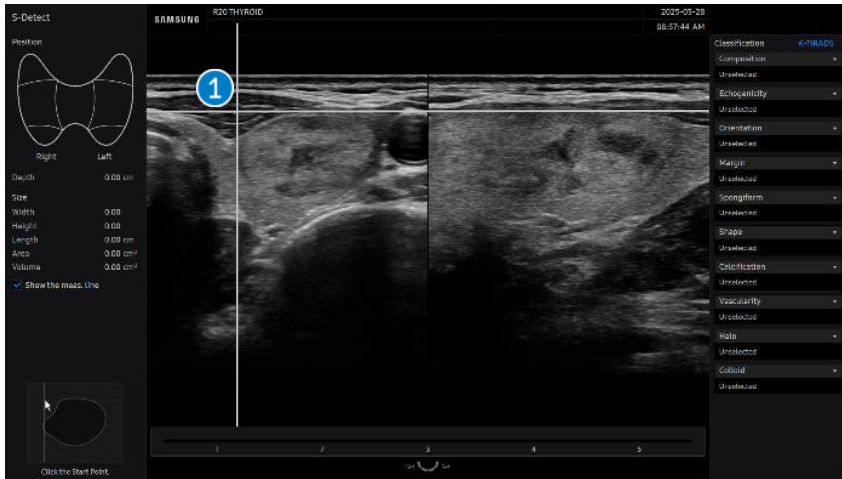
Scan two planes of the lesion using dual mode.

2 S-Detect

Press the [S-Detect] button on the touchscreen to enter S-Detect.



4. Dual - Volume Measurement (2)



1 Target Point

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

2 Detect the boundary

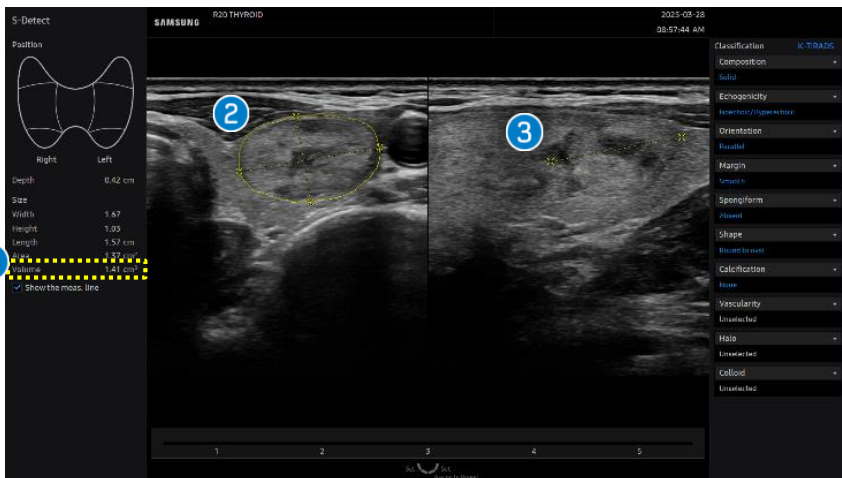
Lesion boundary is automatically detected and displayed as a yellow contour.

3 Caliper

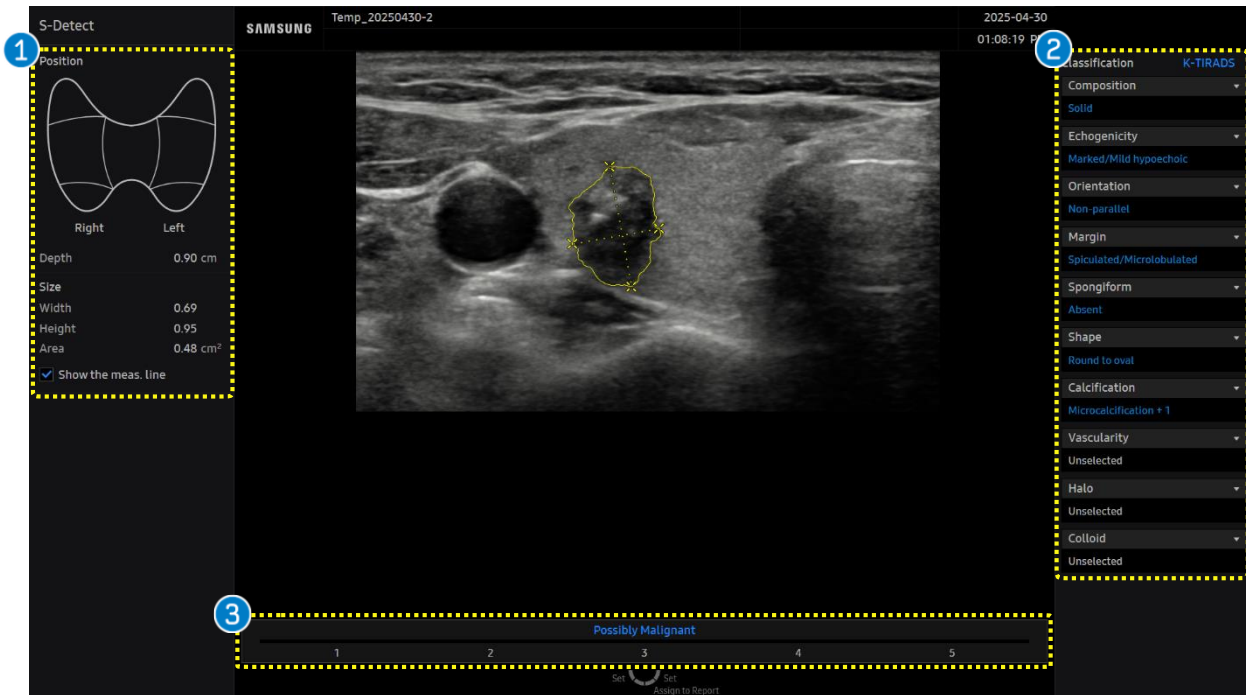
On the side with unmeasured lesion, a caliper would show up. Using the [Set] key and the trackball, measure the length.

4 Volume

An additional result of the volume will be calculated.



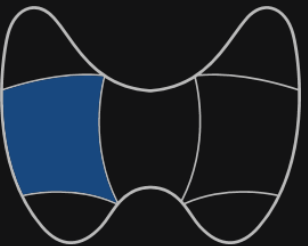
5. Result page



<p>1 Location Information Area</p>	<p>Provides information about the location and size of the lesion.</p>
<p>2 Classification</p>	<p>Provides the Lexicon Classification following the designated reference on Setup. Blue text of classifications - automatically provided. White text of classifications - not specified automatically, so it can be chosen manually by users.</p>
<p>3 Description</p>	<p>S-Detect only suggests whether the lesion tends to be malignant or benign.</p>

6. Result page: Mark the Position

1 Position



Right Left

Depth 0.90 cm


2 Size

Width 0.69

Height 0.95

Area 0.48 cm²

Show the meas. line



S-Detect SAMSUNG Temp_20250430-2 2025-04-30 01:08:28 PM

Position

Right Left

Depth 0.90 cm

Size

Width 0.69

Height 0.95

Area 0.48 cm²

Show the meas. line

Classification K-TIRADS

Composition Solid

Echogenicity Marked/Mild hypoechoic

Orientation Non-parallel

Margin Spiculated/Microlobulated

Spongiform Absent

Shape Round to oval

Calcification Microcalcification + 1

Vascularity Unselected

Halo Unselected

Colloid Unselected

Possibly Malignant

1 2 3 4 5

Set Assign to Report

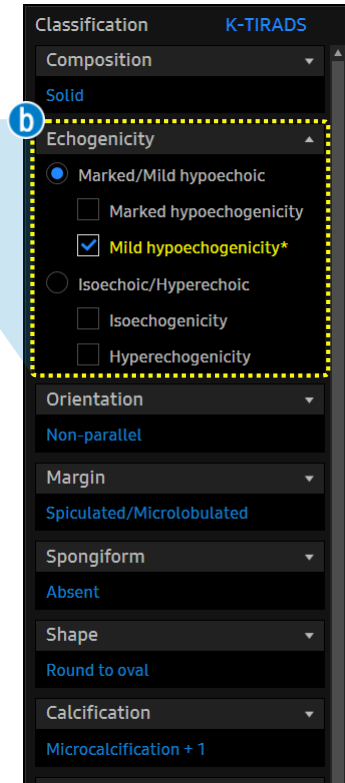
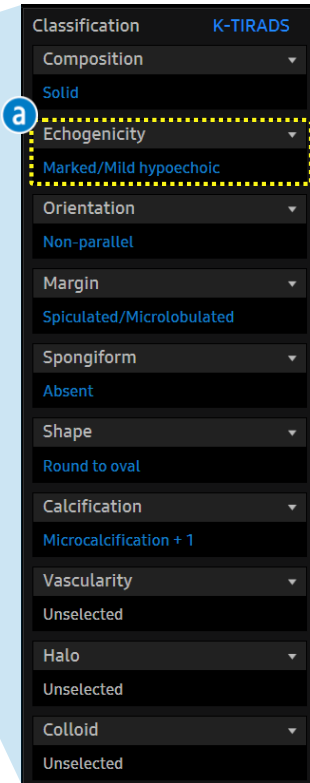
1 Position

Select the location of the lesion on the thyroid diagram and press the [Set] button. Depth of the lesion is automatically displayed under the diagram.

2 Size of lesion

The Width, Height and Area are automatically displayed.

7. Result page: Edit the classification



1 Classifications

a Click the lexicon that you want to modify.

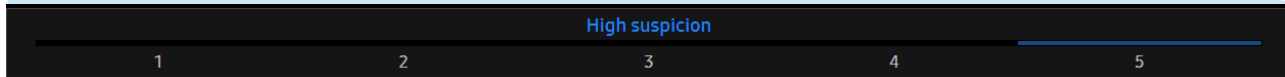
b Edit the result. Modified Classification is represented in yellow.
Classifications can also be edited on the touch screen.

8. Result page: Description and Score

The screenshot displays the S-Detect™ for Thyroid interface. On the left, there is a diagram of the thyroid gland with 'Right' and 'Left' lobes, and a list of measurements: Depth (0.90 cm), Size (Width 0.69, Height 0.95, Area 0.48 cm²), and a checkbox for 'Show the meas. line'. The central part shows a grayscale ultrasound image of a thyroid nodule with a yellow dashed outline. On the right, a 'Classification' panel lists various features: Composition (Solid), Echogenicity (Marked/Mild hypoechoic, Marked hypoechogenicity, Mild hypoechogenicity*, Isoechoic/hyperechoic, Isoechogenicity, Hyperechogenicity), Orientation (Non-parallel), Margin (Serrated/Microlobulated), Spongiform (Absent), Shape (Round to oval), Calcification (Microcalcification +1), Vascularity (Unselected), Halo (Unselected), and Colloid (Unselected). At the bottom, a TI-RADS score of 3 is indicated by a blue bar and a circled '1'.

1 TI-RADS score

Designate the specific TI-RADS Assessment score (1 ~ 5) on the bottom of the screen to make the final decision.



9. Assign to Report

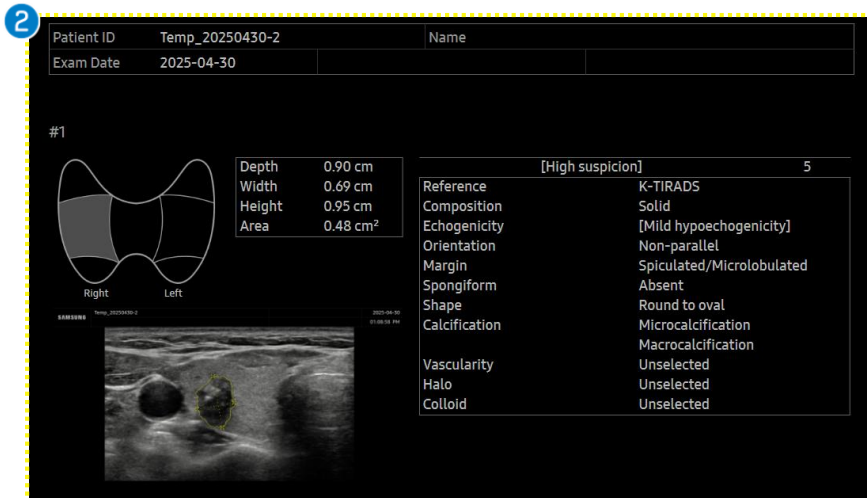


1 Assign to Report

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

2 Report

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



- The features, options may not be commercially available in some countries.
- Sales and shipments are effective only after the approval by the regulatory affairs. Please contact your local sales representative for further details.
- This Quick guide does not include all of the details of instruction, for more detail, please refer to R20 User Manual.
- Do not distribute this document to customers unless relevant regulatory and legal affairs officers approve such distribution.
- This User Quick Guide is based on R20 V1.01.
- Disclaimer: Some Images in this content were obtained from other system.

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