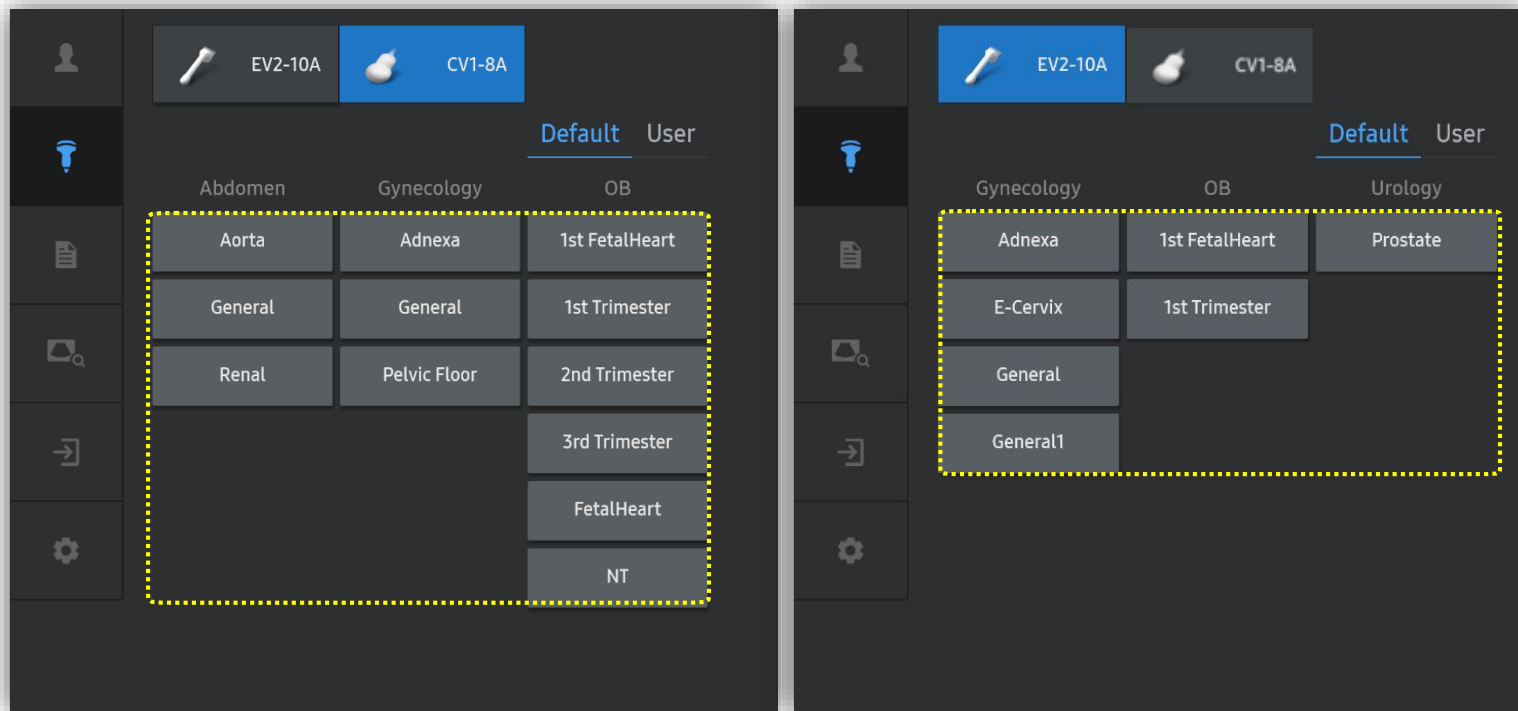


5D CNS+™

HERA W10 User Quick Guide



1. Probe and Preset



※ 5D CNS+™ can be operated under the following conditions :

Probe	Application
CV1-8A EV2-10A	All Application * Select proper preset regarding to fetal gestational age.

2. Volume acquisition



1 Volume acquisition

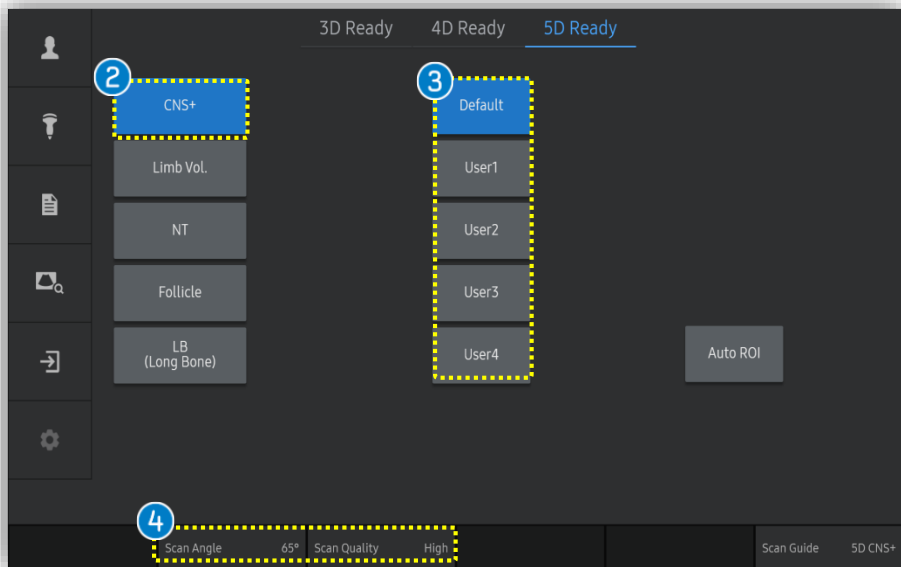
Find true trans-ventricular axial plane or trans-thalamic axial plane before volume acquisition.

3. Activate 5D CNS+™ by 5D Button



1 5D Button

Press [5D] button on the control panel.



2 CNS+

Tap [CNS+] to activate 5D CNS+.

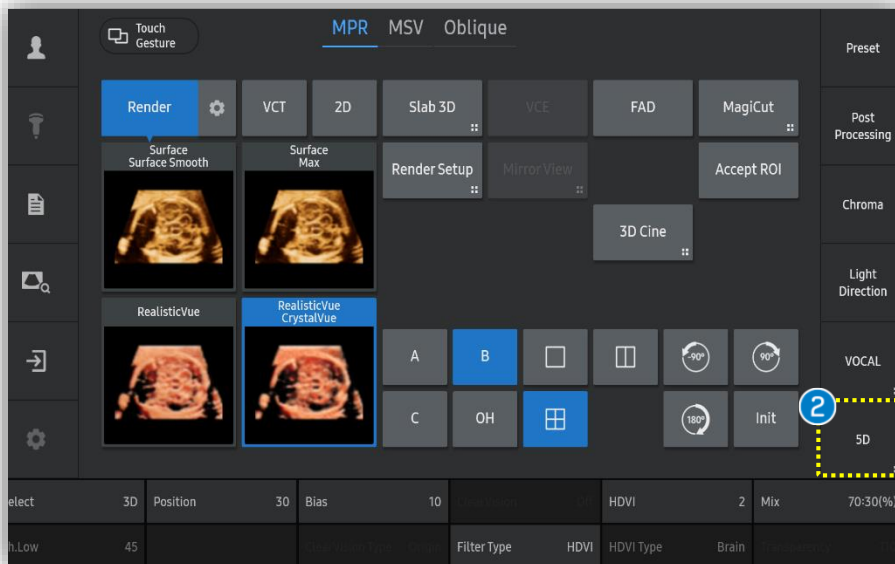
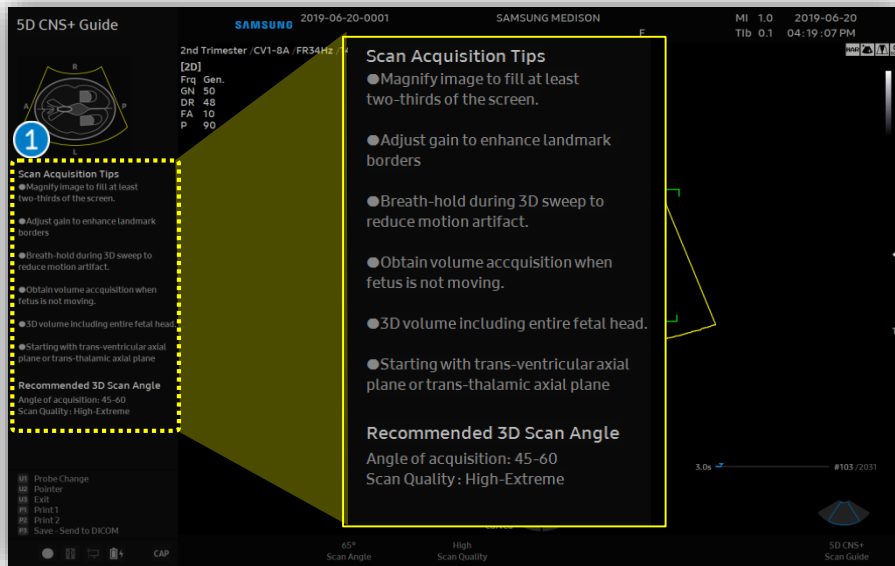
3 Preset

Select preferred preset between default and users. Each 5D feature could have own preset parameters.

4 Parameters

3D [Scan Angle] and [Scan Quality] are customizable.

4. Activate 5D CNS+™ by 5D QuantificationSM



Before 3D acquisition, refer to the '5D CNS+ Guide' on the left top.

Scan Acquisition Tips

- Magnify image to fill at least two - thirds of the screen.
- Adjust gain to enhance landmark borders
- Breath - hold during 3D sweep to reduce motion artifact.
- Obtain volume acquisition when fetus is not moving
- 3D volume including entire fetal head.
- Starting with trans- ventricular plane

Recommended 3d scan angle

- Angle of acquisition : 45-60
- Scan quality : High- extreme

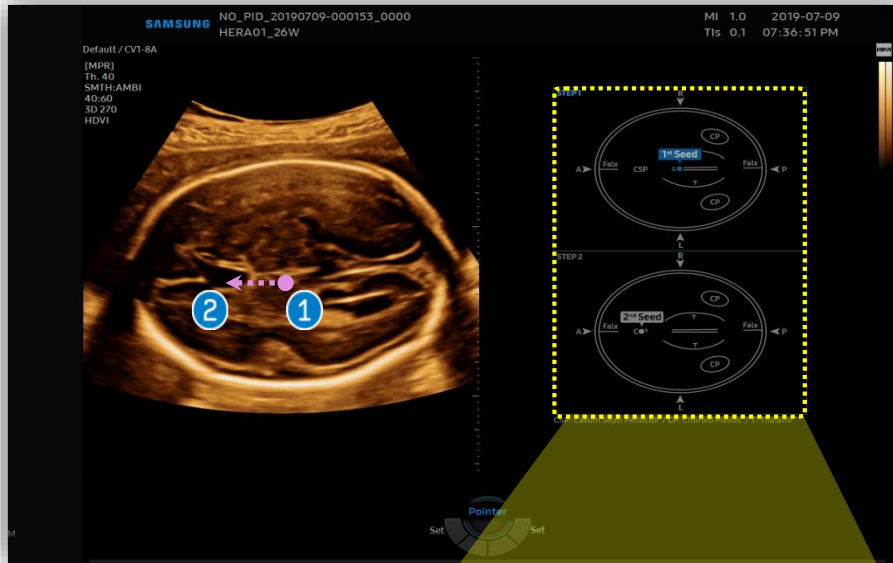
If 3D image acquisition is already done by 3D button as below



5D Quantifications

Tab to activate [5D] features and select [CNS+].

5. Set 1st and 2nd Seed Point



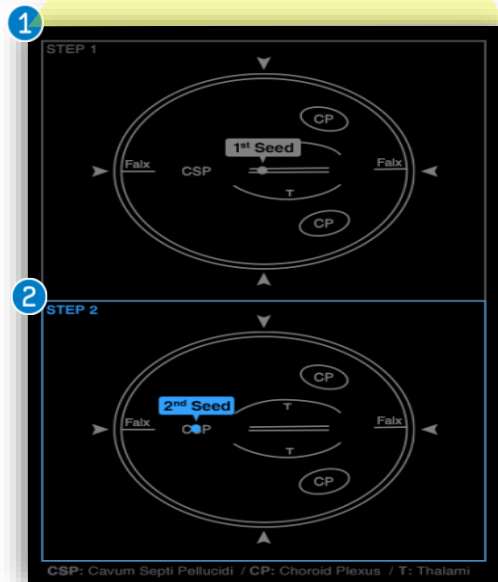
1 1st Seed

Set the 1st seed point on **Center or Middle of thalami** and drag it toward frontal side.

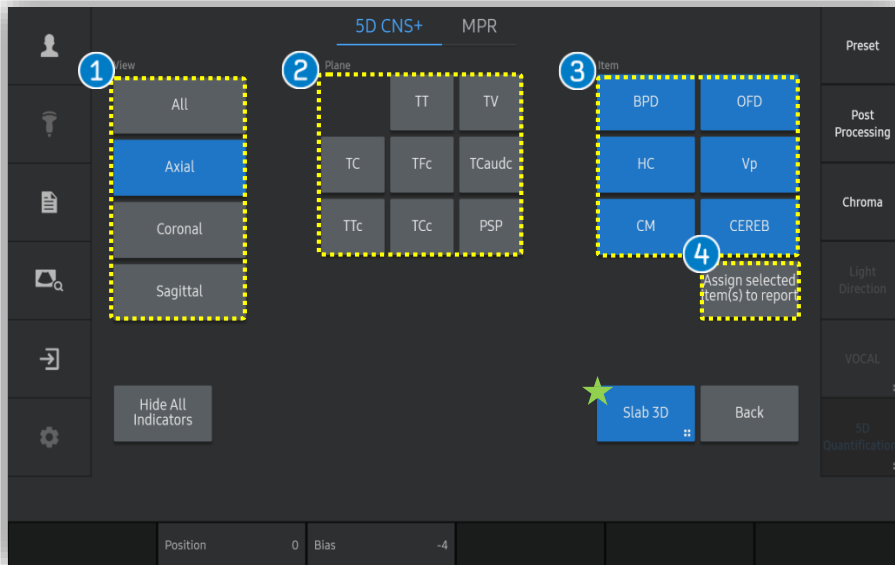
2 2nd Seed

Set the 2nd seed point on **CSP (Cavum Septum Pellucidum)**.

It must be put on the middle of CSP (anechoic area).



6. 5D CNS+™ Touch Screen



After positioning seed point, 9-view will be automatically displayed.

- | | |
|-----------------------------------|--|
| 1 View | Images grouped by section planes |
| 2 Plane | Specific 8-plane for fetal CNS evaluation. |
| 3 Item | Tap to modify each measurement item.
(※ It is only provided on Axial plane) |
| 4 Assign selected items to Report | Select item(s) to assign the report. |



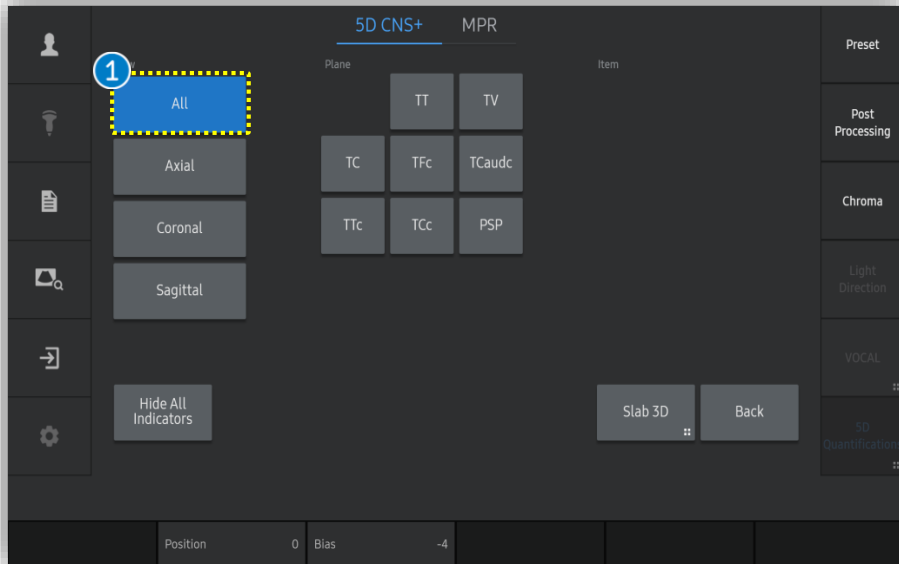
- | | |
|----------|---|
| 5 Report | Selected items will be shown on the report. |
|----------|---|

Notes

❖ Slab 3D

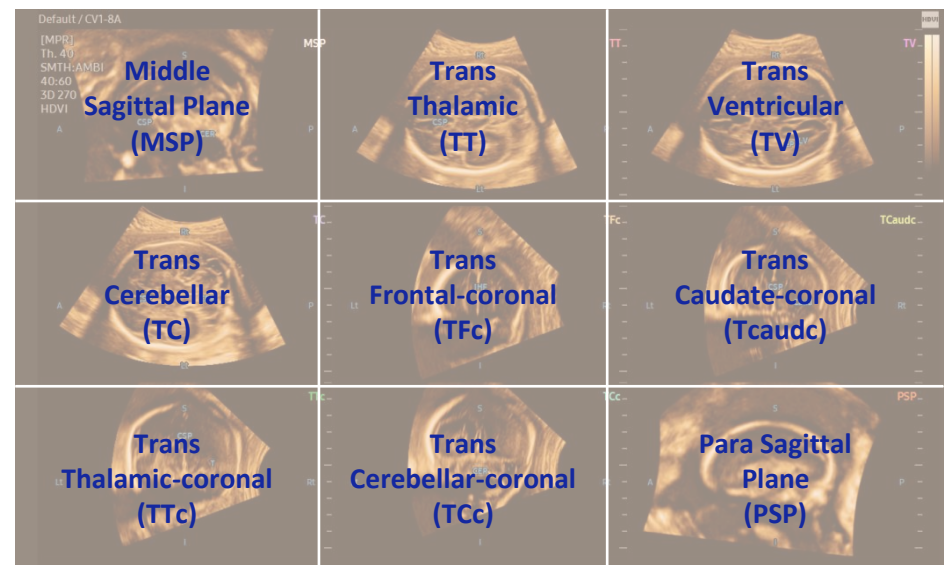
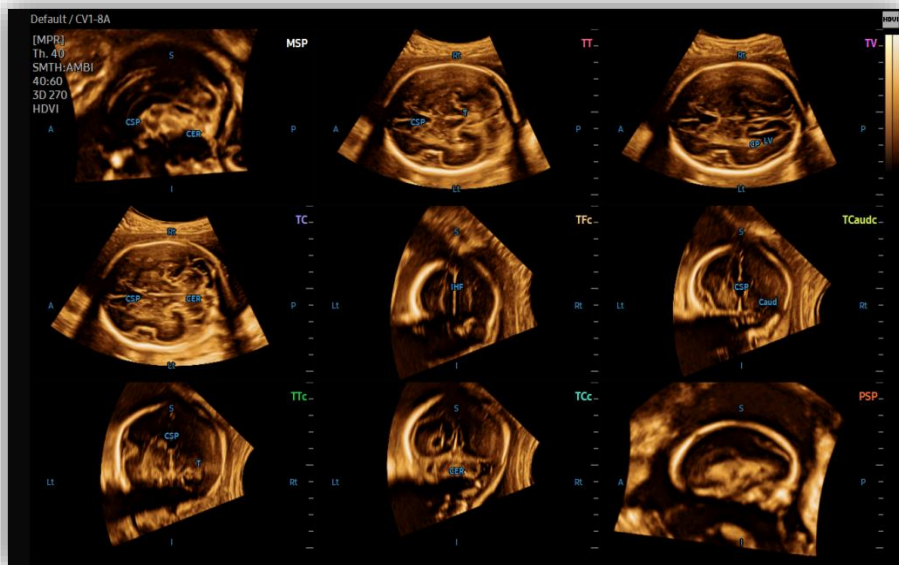
Slices of a 3D image will be displayed as images rendered in 3D. You may select [Slab 3D Type] among Surface, X-ray, Max and Min.

7. Result View (All)

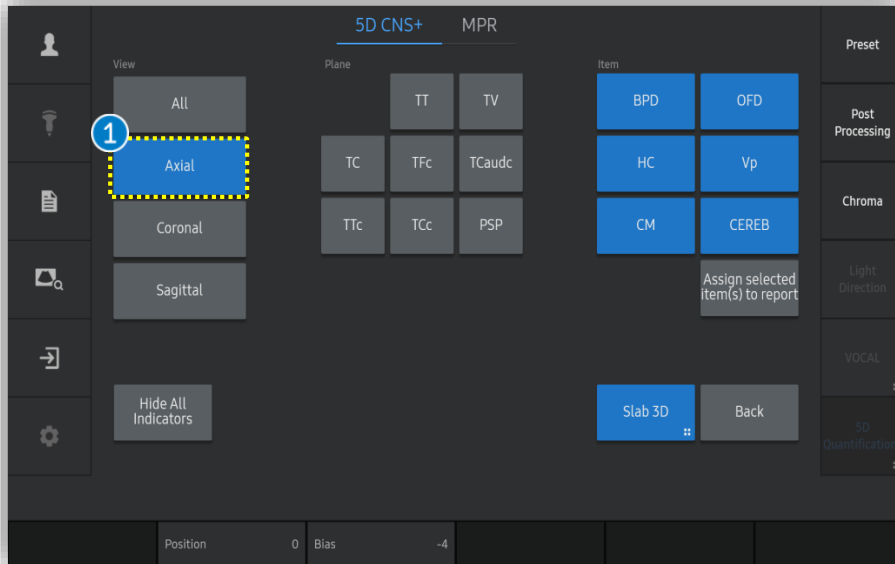


1 All

After placing 1st and 2nd seed point on the image, 5D CNS+ provides 9 planes for fetal head diagnosis, as well as anatomical indicator will be displayed.



8. Result View (All)

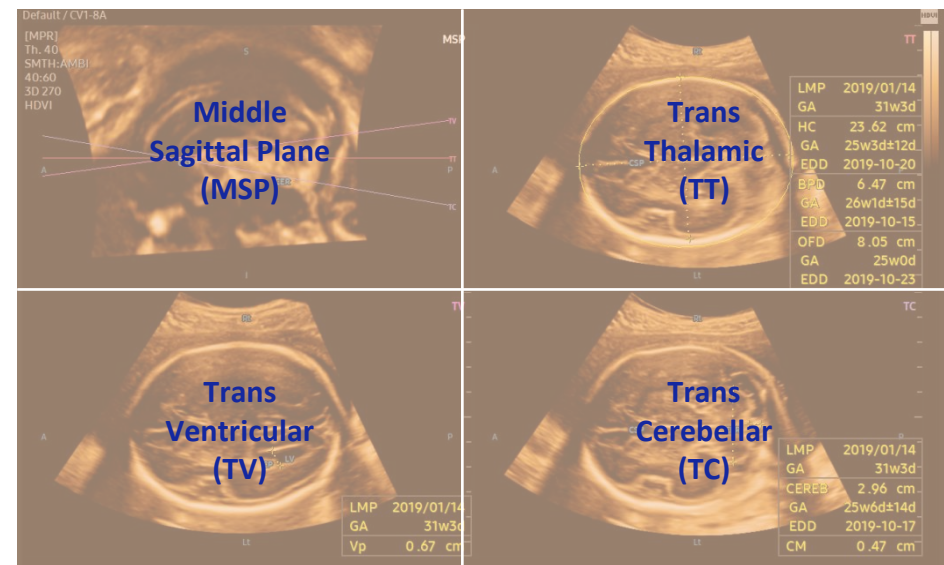
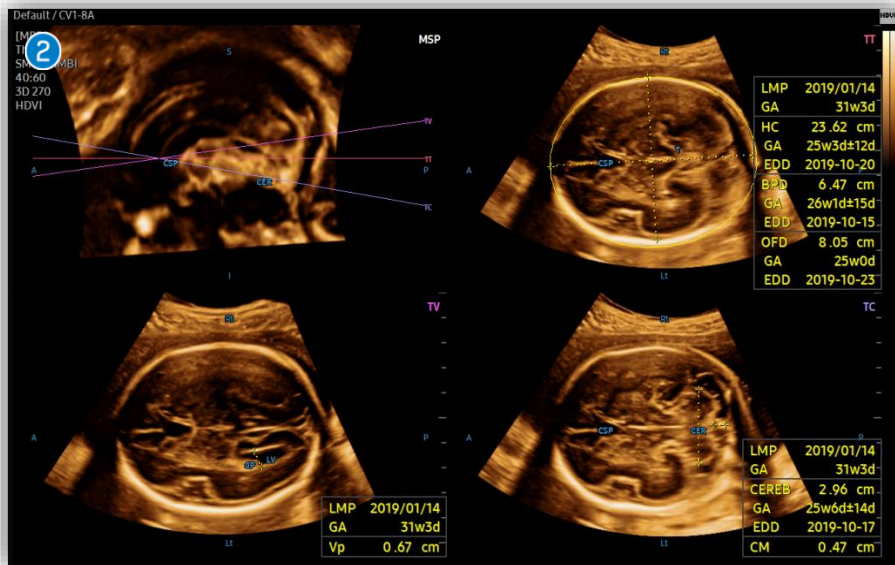


1 Axial

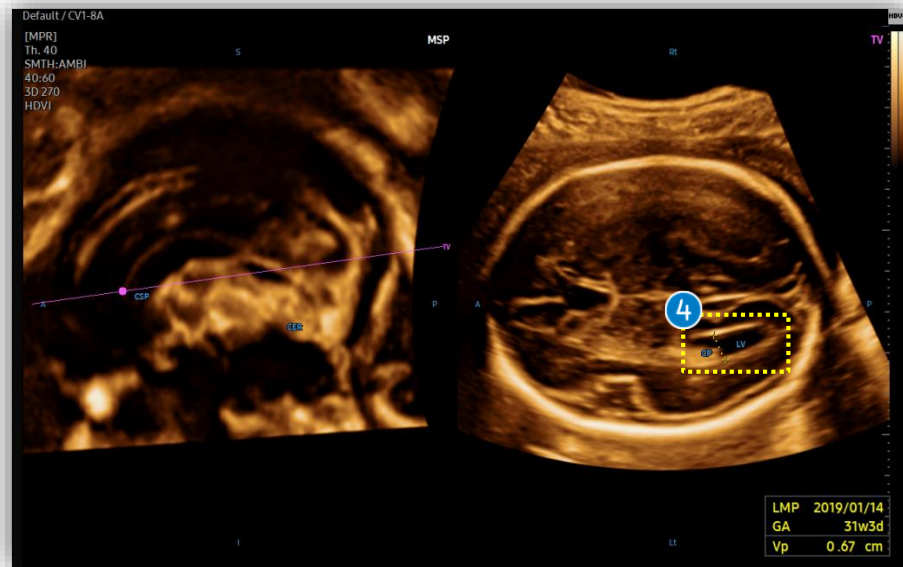
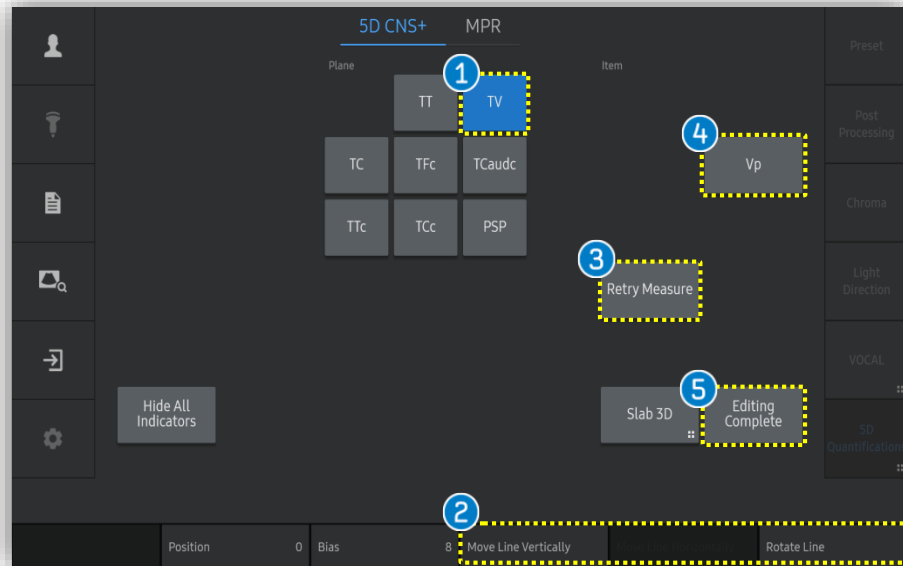
Select Axial to review 3 axial views include TT, TV and TC.

2 CNS+ Measurement result

With Axial view, measurement results will automatically displayed on the monitor include HC, BPD, OFD, Vp, CEREB and CM.



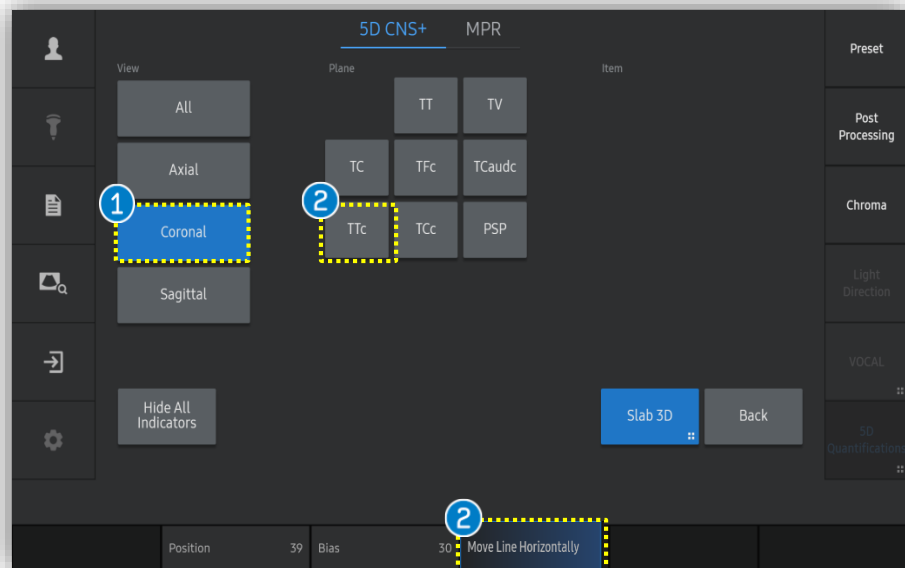
9. Result View (Axial-Retry Measure)



In case of re-measurement,

- | | |
|---|---|
| ① Plane | Tap proper plane among [TT], [TV] or [TC] that has measurement data. |
| ② Move Line Vertically, Move Line Horizontally, Rotate Line | If needed, edit plane by using knob buttons. |
| ③ Retry Measure | Auto measure again on selected plane. |
| ④ Item | Manual measurement on assigned item. |
| ⑤ Editing Complete | Once the editing is completed, tap [Editing Complete] to assign the result. |

9. Result View (Coronal)

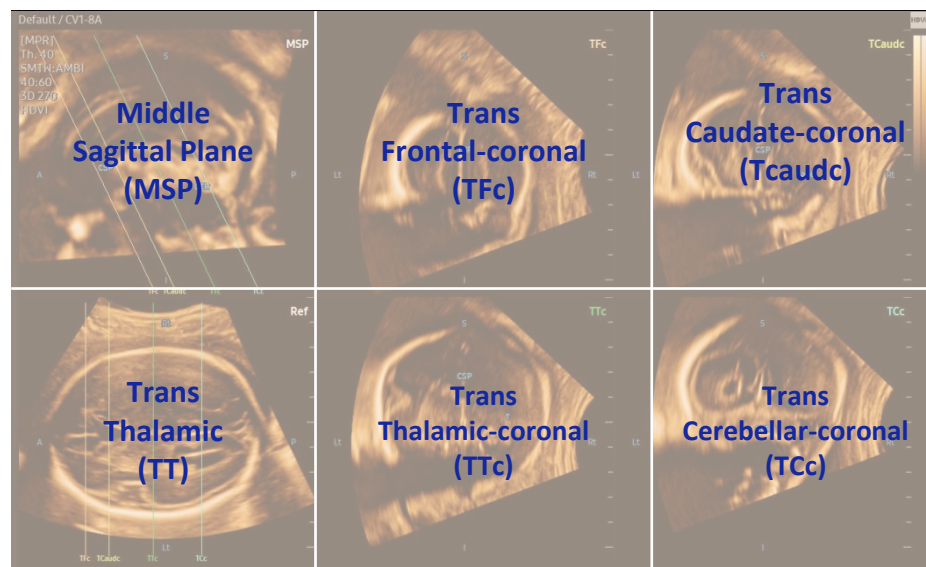
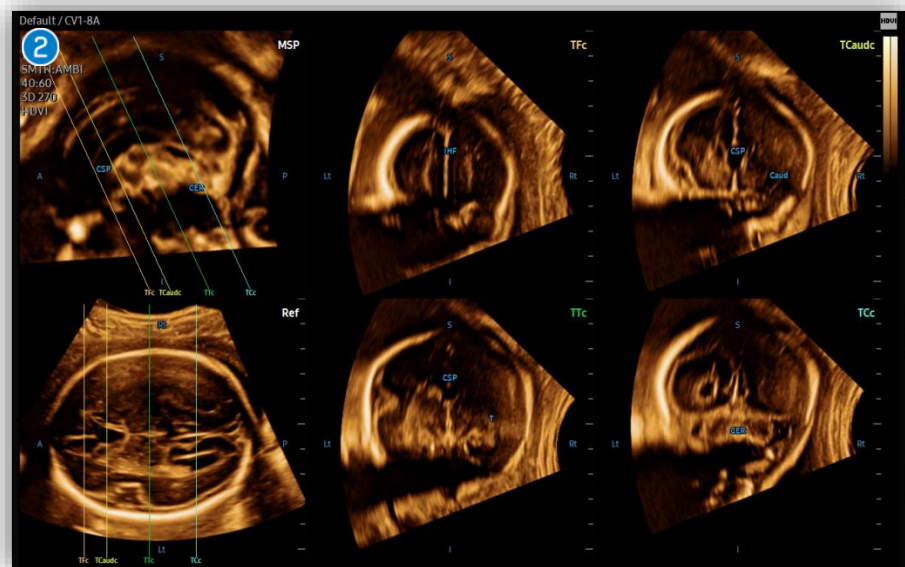


1 Coronal

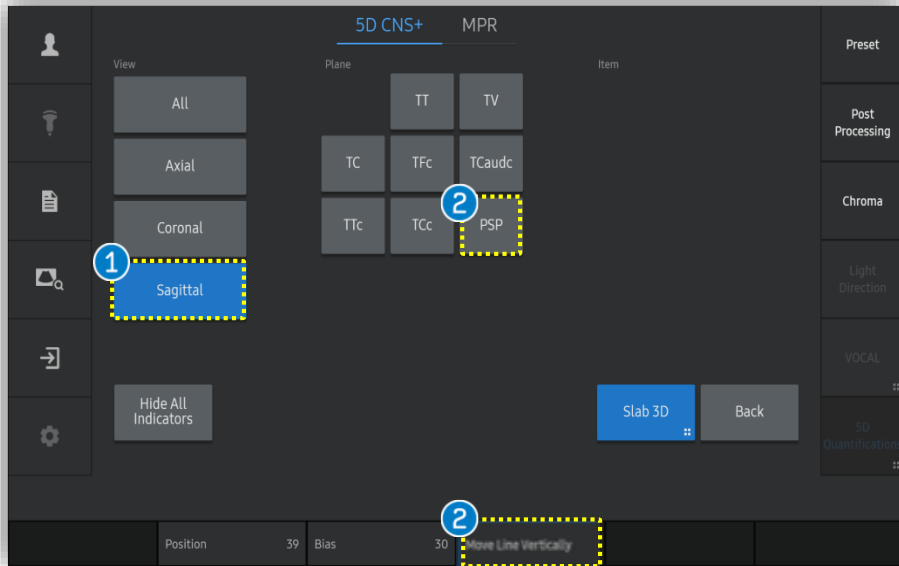
Select Coronal to review 4 Coronal views include TFc, TCaudC, TTc and TCc

2 Move Line Horizontally

Select the plane and if needed, edit plane by using knob buttons



10. Result View (Sagittal)

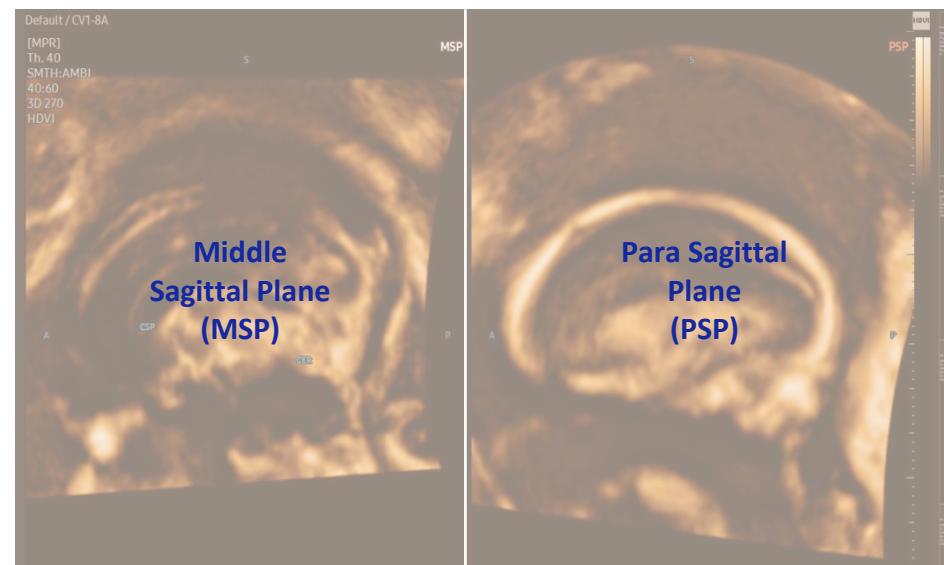
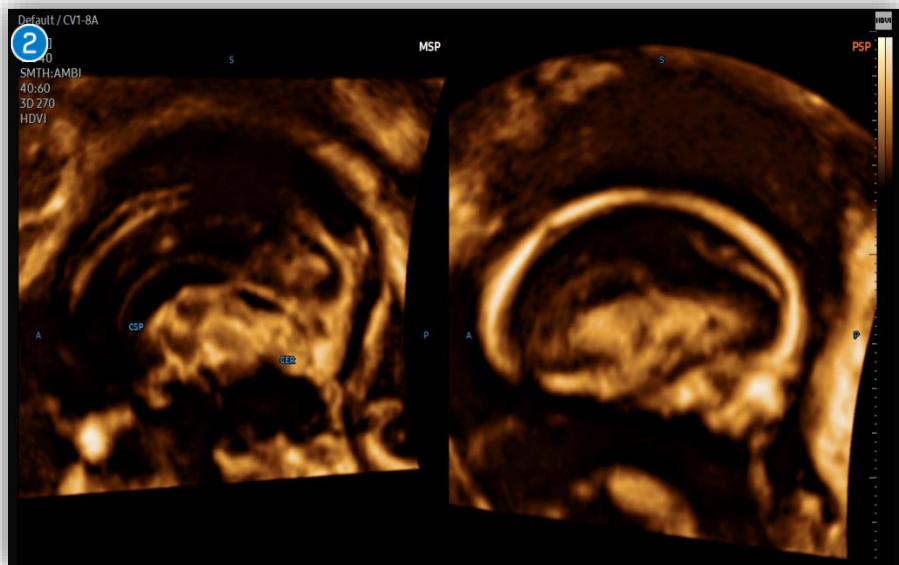


1 Sagittal

Select Sagittal to review the Para Sagittal Plane(PSP).

2 Move Line Vertically

Select the plane and if needed, edit plane by using knob buttons.



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- * 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.