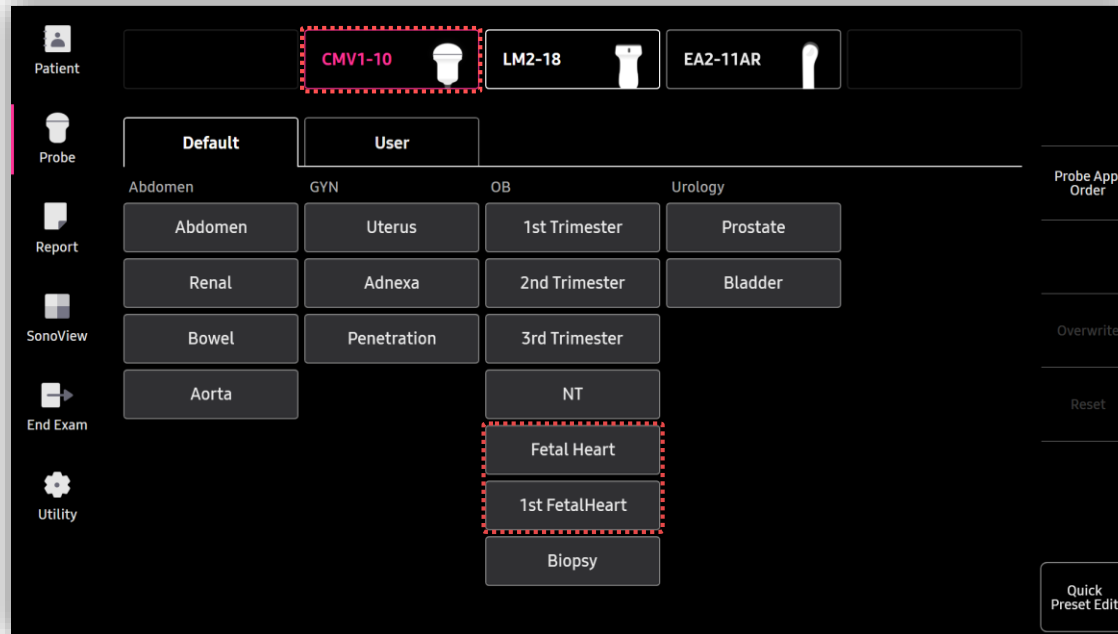


# RV-MPI™

## HERA Z20 Quick Guide



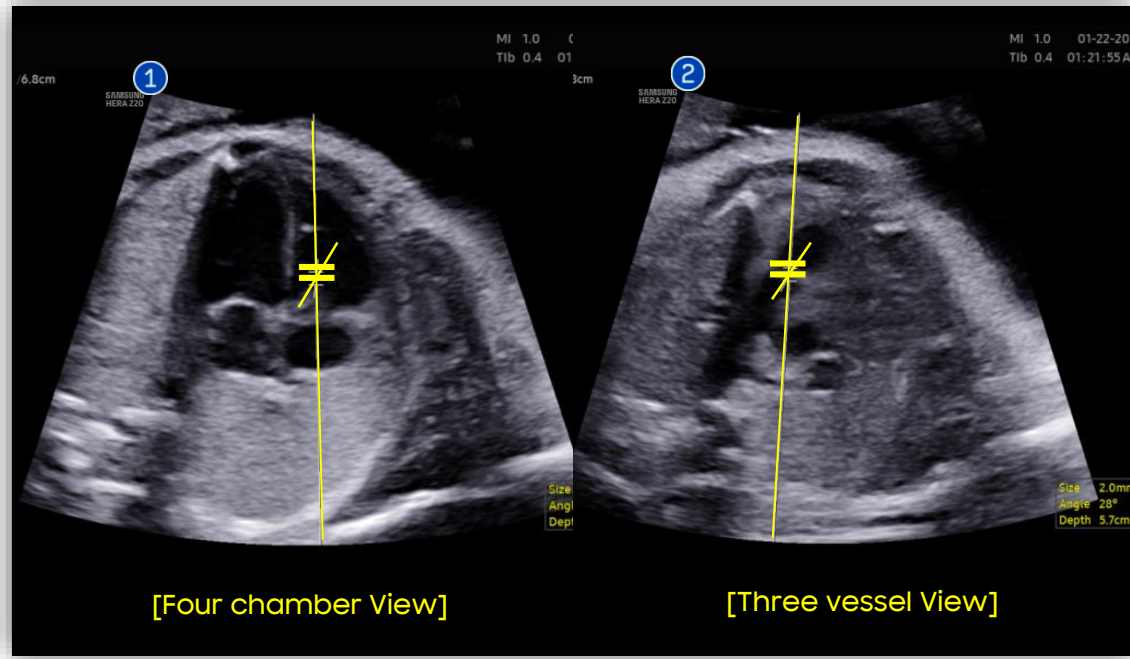
# 1. Probe and Preset



※ RV MPI can be operated under the following conditions :

Probe	Application
CA1-7S, CA1-10A, CV1-8A EA2-11AR, EA2-11AV, EV2-12, CMV1-10	OB(1 <sup>st</sup> Fetal Heart, Fetal Heart, 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> Trimester, NT, Biopsy) * Operate on PW Mode

## 2. Acquire PW Images



① To take inflow wave

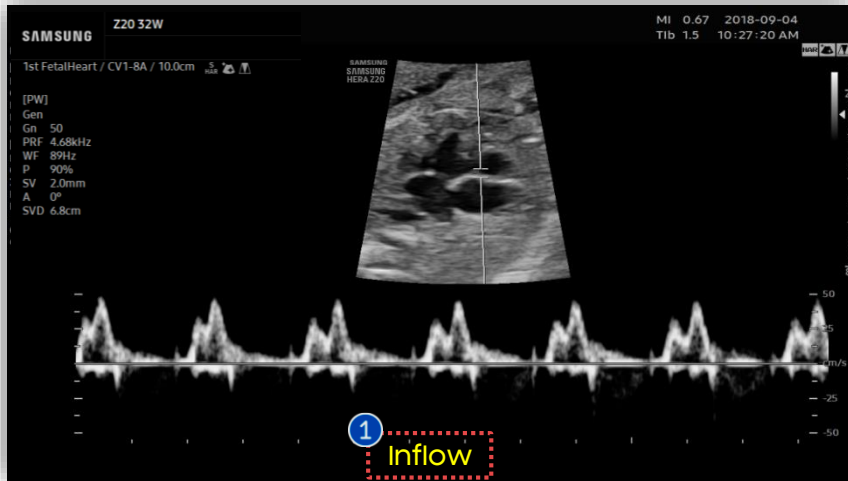
- Scanning plane : Four-chamber view.
- Sample volume position : At the level of Tricuspid valves.

② To take outflow wave

- Scanning plane : 3 vessel and trachea view or RVOT short axis view.
- Sample volume position : At the level of the pulmonary valve.

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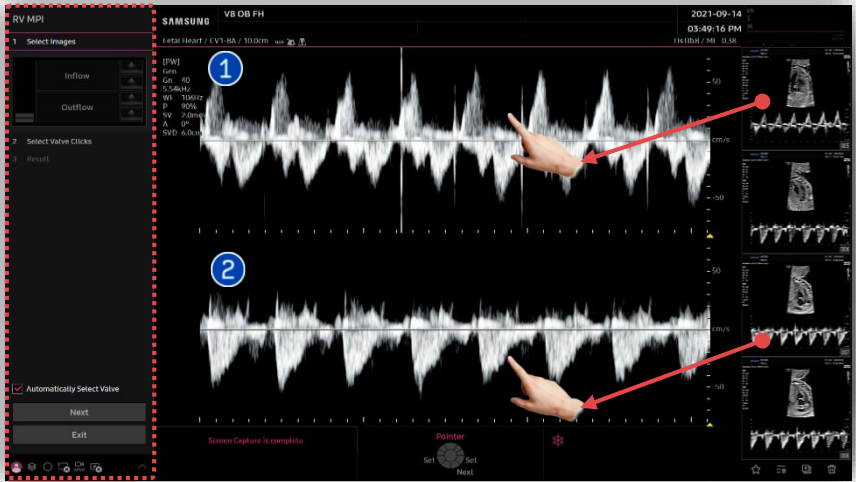
# 3. Acquire Inflow and Outflow images



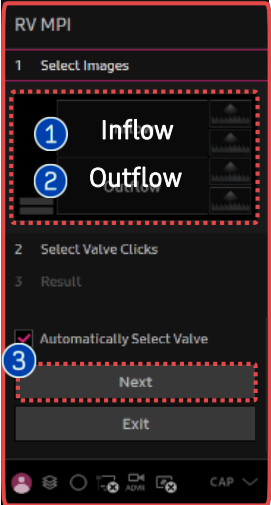
- |                          |   |
|--------------------------|---|
| 1 Acquire Doppler images | Acquire Inflow and Outflow Doppler image in PW mode then Save respectively. |
| 2 RV-MPI                 | Tab [RV MPI] button on Frozen PW screen.                                    |

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# 4. Select images

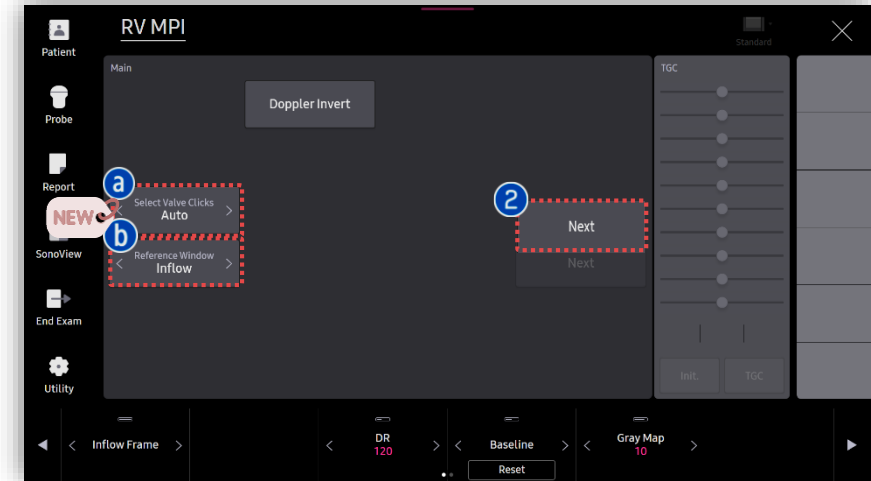
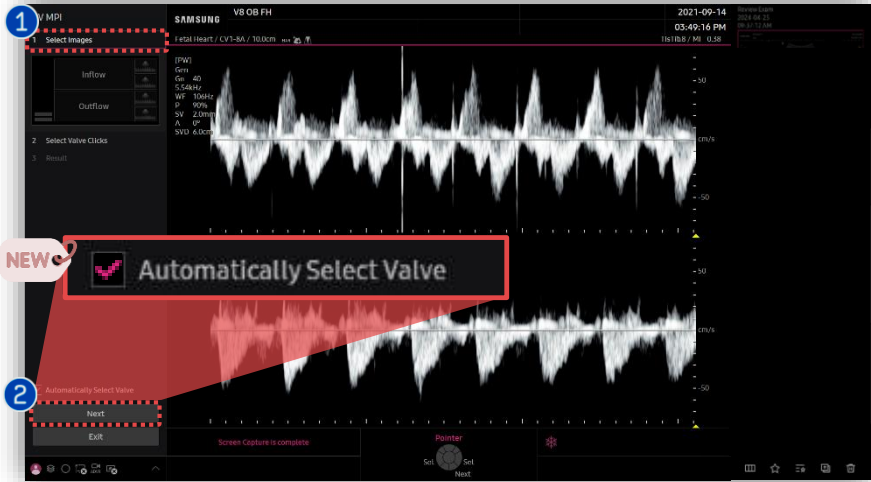


- |   |                         |   |
|---|-------------------------|---|
| 1 | Select an Inflow image  | Select an Inflow image from thumbnail list, then move it to top window in dual screen to assign inflow window by using [Set] button.      |
| 2 | Select an Outflow image | Select an Outflow image from thumbnail list, then move it to bottom window in dual screen to assign outflow window by using [Set] button. |
| 3 | Next                    | Press [Next] button.  |



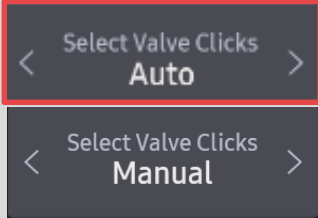
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# 5. Select valve clicks (Auto)



Designate an one cycle on each inflow and outflow to measure where the clicks is well visible.

- a Select Valve Clicks: Select Auto or Manual to choose cycle for RV-MPI.



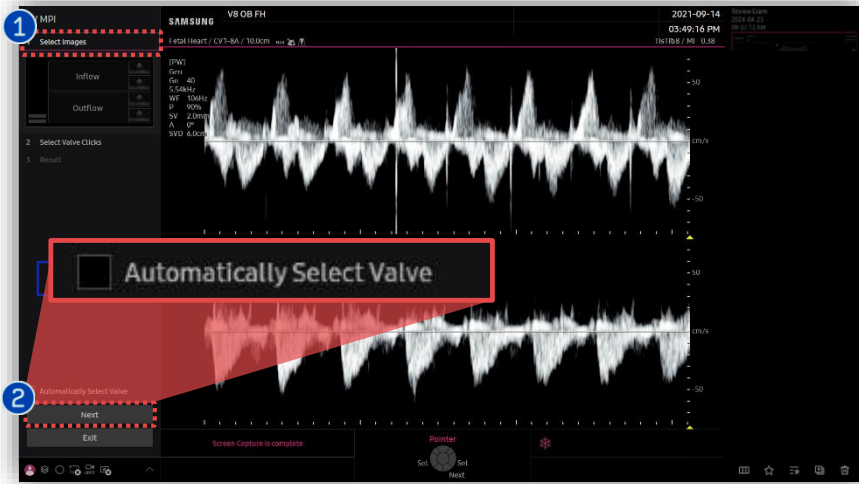
- b Ref. Window : If you select inflow as reference window, bpm of outflow will by synchronized to bpm.

1 Select Images

2 Next

Press [Next] to show the measurement results.

# 5. Select valve clicks(Manual)



Designate an one cycle on each inflow and outflow to measure where the clicks is well visible.

1 Select Valve Clicks

a Select Valve Clicks: Select Auto or Manual to choose cycle for RV-MPI.

2 Next

Press [Next] to show the measurement results.

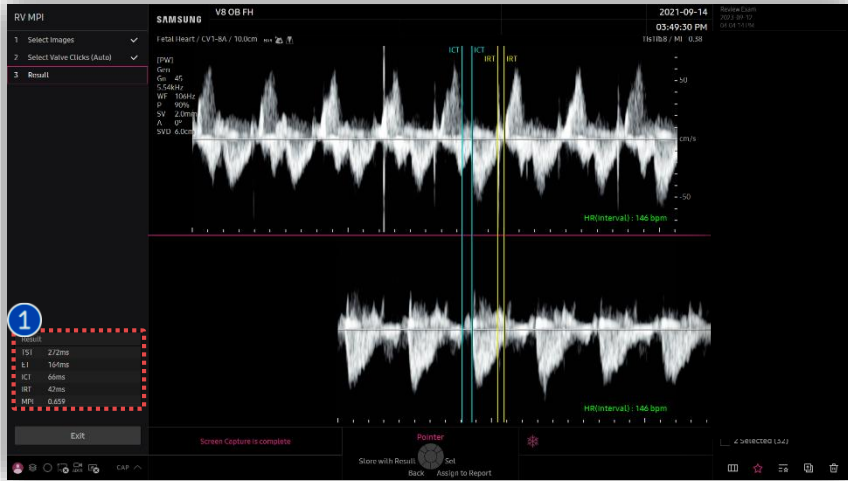


★ Tips

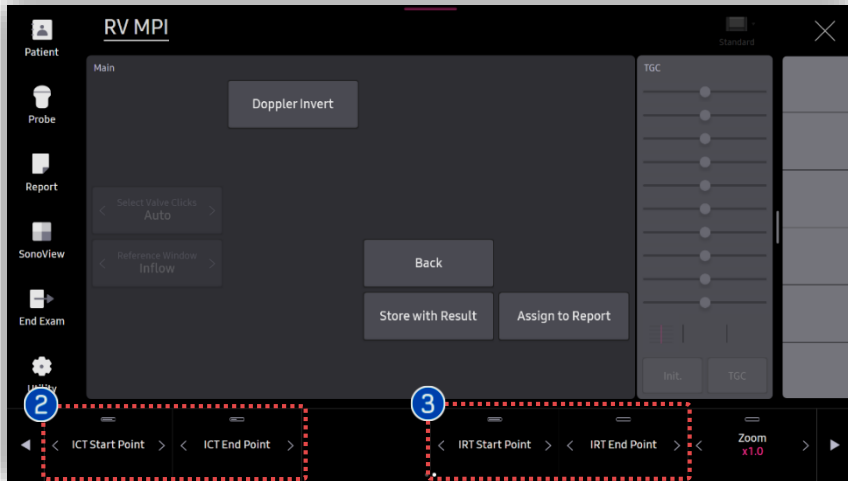
If the heart beat of the two selected Doppler deviates by  $\pm 5$  bpm, an error message appears on the bottom of the monitor.

**HR Values differences should be less than 5 bpm.**

# 6. Result of RV MPI



- ① Results
- TST(ms) : Total Systolic Time.
  - ET(ms) : Ejection Time.
  - ICT(ms) : Isovolumetric Contraction Time.
  - IRT(ms) : Isovolumetric Relaxation Time.
  - Mod-MPI : Modified Myocardial Performance Index.
- | Result |       |
|--------|-------|
| TST    | 249ms |
| ET     | 172ms |
| ICT    | 32ms  |
| IRT    | 45ms  |
| MPI    | 0.448 |



② ICT Start, End Point

You can modify start and End point of ICT by rotating knob on the touch screen.

③ IRT Start, End Point

You can modify start and End point of IRT by rotating knob on the touch screen.

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- 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 Z20 V1.00
- Disclaimer: Some Images in this content were obtained from other system.

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