# Optimization of Hemodialysis Adequacy for Catheter Connection Configuration with the Transonic Flow-QC<sup>®</sup> Hemodialysis Monitor — Step One

## MEASURE DELIVERED BLOOD FLOW RATE

With the bloodlines configured as normally used (document configuration), measure flow. Transonic Delivered blood Flow rate (Qb) is within 0-10% of the hemodialysis machine's set blood pump speed or delivery flow rate.\*



## TRANSONIC DELIVERED BLOOD FLOW RATE (QB) IS WITHIN 0-10% OF HEMODIALYSIS MACHINE'S SET

Current blood pump setting is maximizing the Delivered blood Flow with the current catheter to bloodline configuration.

PROCEED TO RECIRCULATION MEASUREMENT

YES

## TRANSONIC DELIVERED BLOOD FLOW RATE (QB) IS WITHIN 0-10% OF HEMODIALYSIS MACHINE'S SET OR DELIVERY FLOW READING\*

Current blood pump setting is maximizing the Delivered Blood Flow with the current catheter to bloodline configuration.

PROCEED TO RECIRCULATION MEASUREMENT

\*Some Hemodialysis Machine's display both a Set Blood Pump Speed and Delivery Flow Reading. If both readings are displayed on your Hemodialysis machine use the Delivery Flow Reading

## **Catheter Configurations:**

- Normal Configuration: Arterial Catheter Hub to Arterial Bloodline + Venous Catheter Hub to Venous Bloodline
- Reverse Configuration: Arterial Catheter Hub to Venous Bloodline + Venous Catheter Hub to Arterial Catheter Hub

## Transonic 1-800-353-3569 Support Line



TRANSONIC DELIVERED BLOOD FLOW RATE (QB) IS >10% LOWER THAN THE HEMODIALYSIS MACHINE'S SET BLOOD PUMP SPEED OR DELIVERY FLOW READING\*

Only proceed if both catheter lumens had blood return with treatment initiation.

Using aseptic technique, reverse the catheter configuration by reversing the blood lines to the opposite lumens of the catheter than used for the initial measurement. Document configuration.

Repeat the blood flow measurement.



TRANSONIC DELIVERED BLOOD FLOW RATE (QB) IS 10% LOWER THAN THE HEMODIALYSIS MACHINE'S SET BLOOD PUMP SPEED

Carefully document measurement and catheter configurations.

Proceed to recirculation measurements with both catheter configurations.

Escalate the results of the findings to the nephrologist for possible catheter evaluation or prescription adjustment to address catheter dysfunction.



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# Optimization of Hemodialysis Adequacy for Catheter Connection Configuration cont. Step Two

YES

## CHECK RECIRCULATION

With the bloodlines configured from Step One with maximized Delivered Blood Flow Rate,

## **MEASURE RECIRCULATION**

Recirculation is within 0 - 10%



## **RECIRCULATION IS GREATER THAN 10%**

Only proceed if both catheter lumens had blood return with treatment initiation

Using aseptic technique, reverse the catheter configuration by reversing blood lines to the opposite lumens of the catheter than used for the initial measuremen.

REPEAT RECIRCULATION MEASUREMENT



## **RECIRCULATION IS GREATER THAN 10%**

Carefully document measurement and catheter configurations.

Escalate the results of the findings to the nephrologist for possible catheter evaluation or prescription adjustment to address catheter dysfunction. YES

## **RECIRCULATION IS WITHIN 0-10%**

Current blood pump setting is maximizing Delivered Blood Flow with the current catheter to bloodline configuration.

## **RECIRCULATION IS WITHIN 0-10%**

Current blood pump setting is maximizing the Delivered Blood Flow with the current catheter to bloodline configuration.



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