

# Home Hemodialysis Devices: Providing Optimal Hemodialysis with Minimal Burdens

Annual Dialysis Conference

February 10, 2020

Kansas City, Missouri

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# Devices FDA approved for HHD, NHD & Solo

- FDA approved NxStage System One™ & System One S for Home Hemodialysis, Nocturnal Home Hemodialysis and Solo Home Hemodialysis (without a care partner) during waking hours
- FDA approved Fresenius 2008 K@ Home for Home Hemodialysis
- No machine is FDA approved for Pediatric use
- All machines used for HHD & NHD not approved by FDA must be ordered by the physician off label
- All machines used for HHD and NHD for pediatric patients must be ordered by the physician off label

An exciting time for the Renal Community!

Evolving Technology for HHD will make a  
difference in how we approach the  
“Advancing American Kidney Health  
Initiative”!

# The Advancing American Kidney Health initiative has 3 principal goals:

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1. Reduce the number of Americans developing ESRD by 25% by 2030
2. 80% of new ESRD patients in 2025 will either start at home or start with a transplant
3. Double the number of organs available for transplant by 2030

# Devices to be presented February 10, 2020

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- 2:00 Quanta SC+ - Paul Komenda, MD, MHA
- 2:25 Physidia S3 - Steve Haupt, MBA
- 2:50 Outset - Tablo - Michael Aragon MD
- 3:15 NxStage System One - Jose Molina, MBA
- 3:40 to 4:00 Summary and Discussion - Robert S. Lockridge, MD
- 4:00 to 4:15 Break
- 4:15 to 5:30 Demonstration of the devices
- 5:30 Adjourn

	NxStage	Tablo	Physidia	Quanta
Single pass dialysate	Yes	Yes	Yes	Yes
Batch dialysate	Yes	No	No	No
Online dialysate	No*	Yes	No*	Yes
HCO3 dialysate	No*	Yes	Yes	Yes
Minimum dialysate flow cc/ min	0	100	150	200
Max dialysate flow cc/min	300	300	200	500
Sterile dialysate bags	Yes	No	Yes	No*
Machine reuse artificial kidneys	No	No	No	No
Machine cartridge set up	Yes	Yes	Yes	Yes
Uses standard blood, dialysate lines & kidneys	No	No/Yes*	No/Yes*	No

	NxStage	Tablo	Physidia	Quanta
Built in Heparin pump	No	Yes*	No	No
Air blood interface	No*	Yes	Yes	Yes
Venous medication port	Yes	Yes	Yes	Yes
Venous disconnect (Machine stops)	No	No	Yes*	No
Single needle use	Yes/No*	No	No	No
Standard air & blood leak detectors	Yes	Yes	Yes	Yes
Built in moisture detectors	Yes	Yes	No*	No*
Monitor arterial pressure	Yes	Yes	Yes	Yes
Monitor venous pressure	Yes	Yes	Yes	Yes
Built in BP cuff	No*	Yes	Yes	No*

	NxStage	Tablo	Physidia	Quanta
Download encrypted data to clinic	Yes	Yes	Yes	Yes
Real time monitoring	No	No	No	No
Minimum blood flow cc/min	0*	50	100	50
Max blood flow cc/min	600	400	350	450
Traditional roller blood pump	Yes	No*	No*	Yes
Water purification RO vs DI	DI	RO	Sterile IV Fluid	RO*
Water system part of machine	Yes/No*	Yes	Yes/No*	No
Water Standard Ultrapure	Ultrapure	AAMI* standards	Sterile IV quality	Ultrapure
Automatic prime	Yes	Yes	Yes	Yes
Automatic rinse back	Yes	Yes	Yes	Yes

	NxStage	Tablo	Physidia	Quanta
Vary sodium in dialysate	No	Yes	No	Yes
Vary HCO3 in dialysate	NA	Yes	No	Yes
Vary temperature of dialysate	Yes	Yes	Yes	Yes
Vary lactate level in dialysate	Yes	NA	No	NA
Vary calcium level in dialysate	Yes	Yes	No	Yes
Vary potassium in dialysate	Yes	Yes	Yes	Yes
Add PO4 to dialysate	No	No	No	No
Calculate ultra-filtration per hour	Yes	Yes	Yes	Yes
Ultra- filtration: Volumetric	Volumetric	Volumetric	Volumetric	Volumetric

	NxStage	Tablo	Physidia	Quanta
Automatic bolus NS	No	Yes	Yes	No
Automatic bolus ultra pure dialysate	No	No	Yes	No
Portable Machine/Weight/Why	Yes	No	Yes	Yes
Max liters of dialysate produced per treatment*	60 L/Tx	95L/Tx	36L/Tx	240 L/Tx
Provide conventional HD 3 x per week	No	Yes	No	Yes
Provide Conventional QOD HD	Yes/No	Yes	No	Yes
Provides Short Daily 5 x per week	Yes	Yes	Yes	Yes
Provide QOD extended	Yes	Yes	No	Yes
Provide Daily extended	Yes	Yes	No	Yes

Questions?

Thanks!

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