

"Ich hab' noch
einen Koffer
in Berlin"

NextKidney: Portable Hemodialysis





Dialysis Anytime
Anywhere

NeXtkidney

NeXtkidney

KIDNEY
FOR-D
WIERINGA
NON-MEMBER

Potential conflicts of interest declaration

The content of the following speech is the result of efforts to achieve the maximum degree of impartiality and independence.

As a speaker, I wish to point out that there are **personal connections** to companies whose products are of interest within the context of the following speech. The companies concerned and connections are listed below:

Companies	Connections (Fee for activities associated with lecturing and in an advisory capacity expert reports and work as an author; fee for preparing training programmes; reimbursement for travel and accommodation costs; reimbursement of participation fees regarding training courses; patents; money from licences and royalties; fee for undertaking commissioned studies; receipt of research funds, etc.)
NextKidney	Consultancy fee for Technological & Regulatory issues

Fokko Wieringa, PhD, Medical **Technologist** (no medical doctor)

Affiliations:

100% employed by:



5% hired consultant for:



5% hired consultant for:



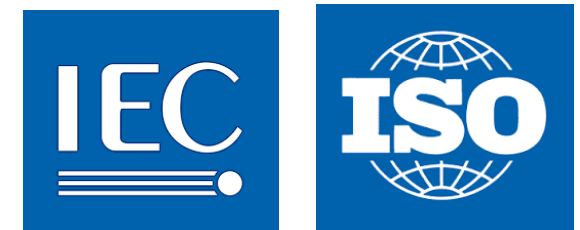
10% associate professor:

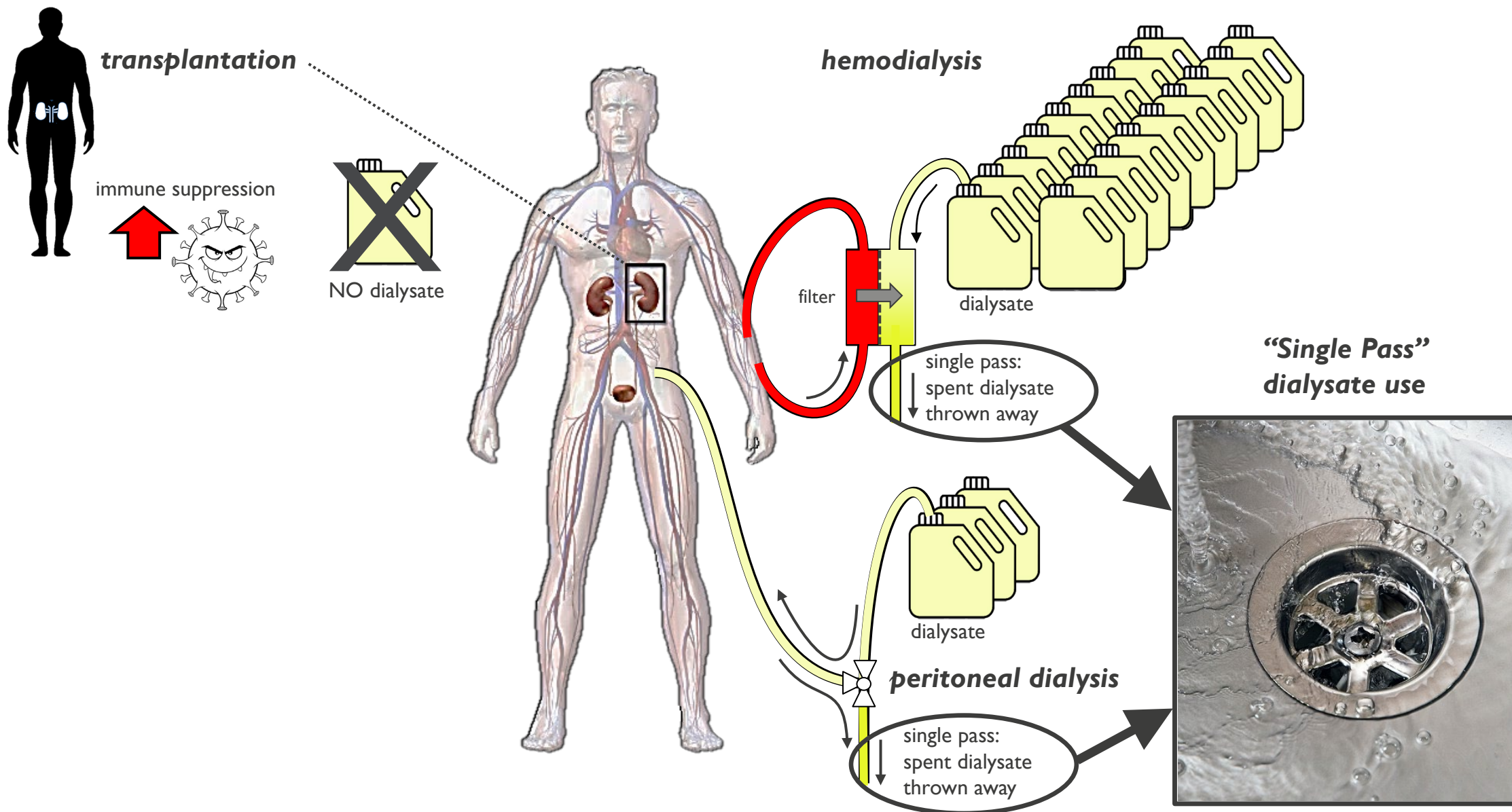


Elected chair of:



Represent Netherlands in:





Single Pass machines got simpler & smaller



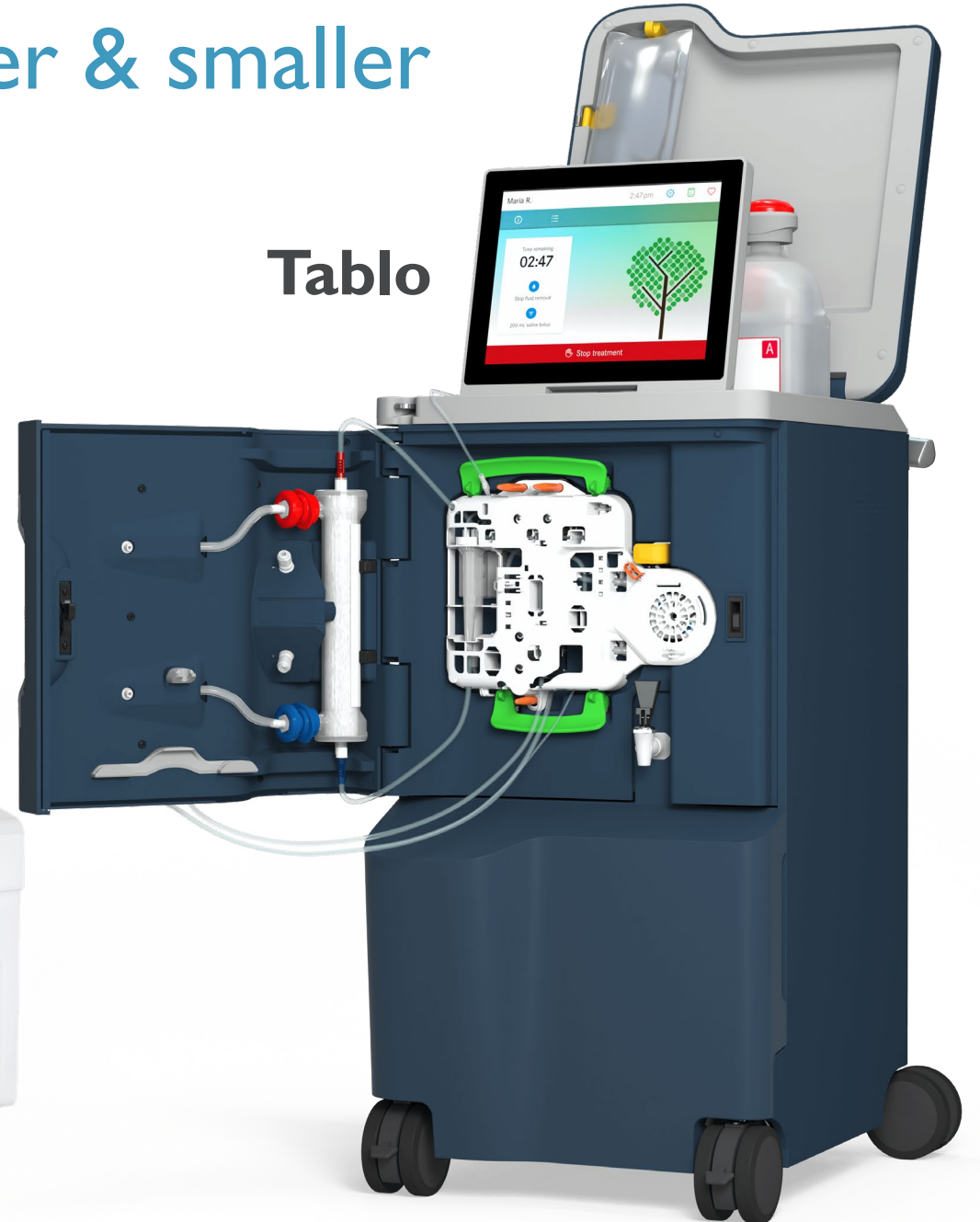
NxStage® VersiHD™



Quanta SC+



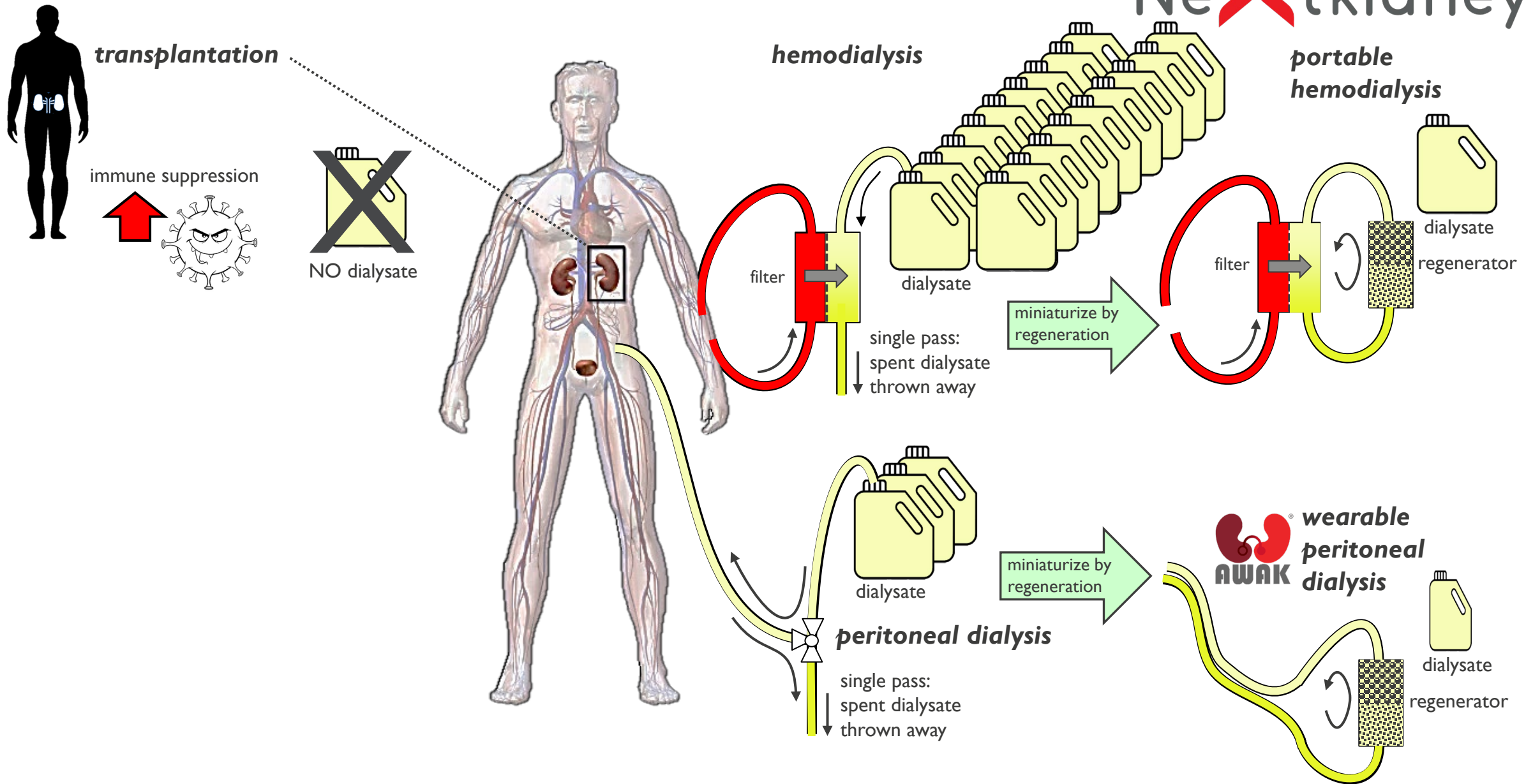
Physidia



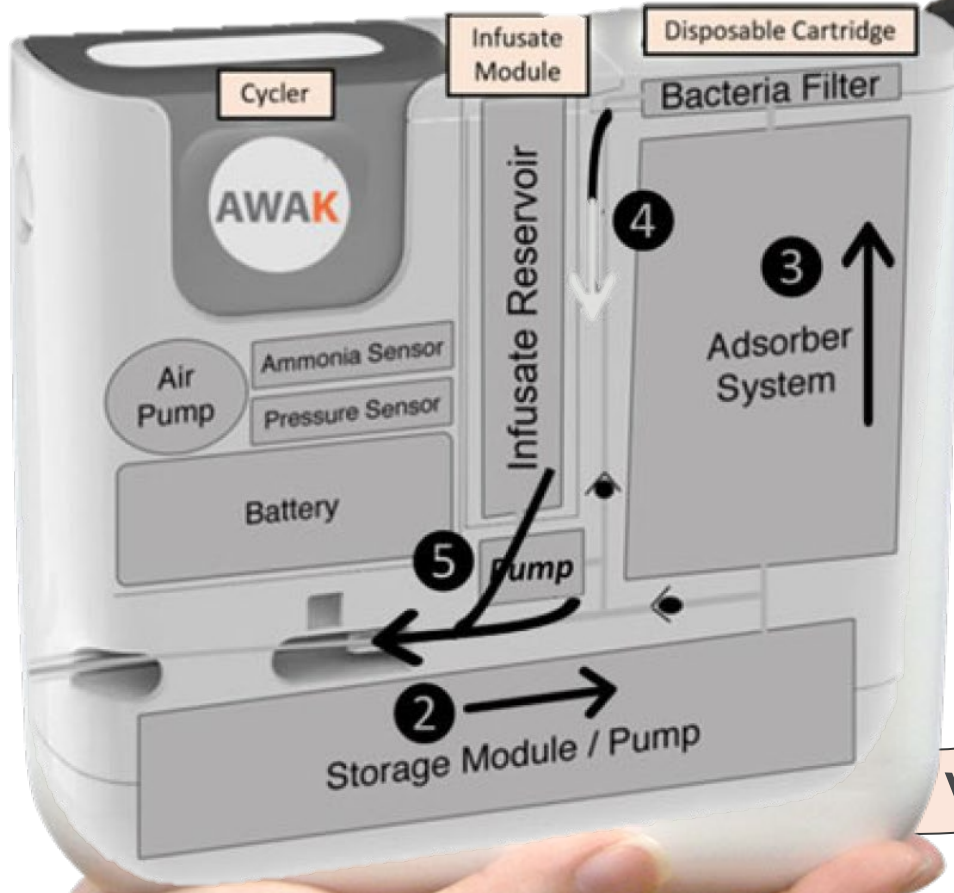
Tablo

Single Pass machines dump dialysate: limits miniaturization





Martin Roberts † Sorbent for AWAK PD



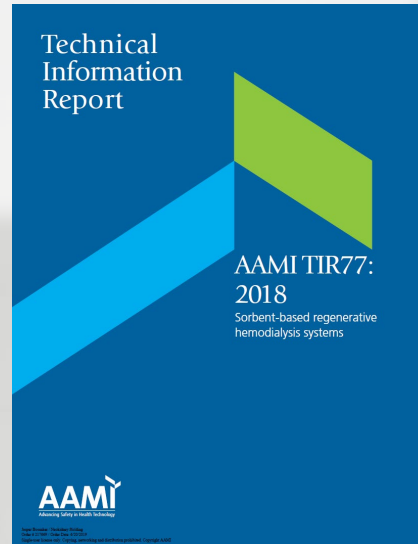
wearable PD

Christian Blüchel NeXtkidney Sorbent for Portable HD



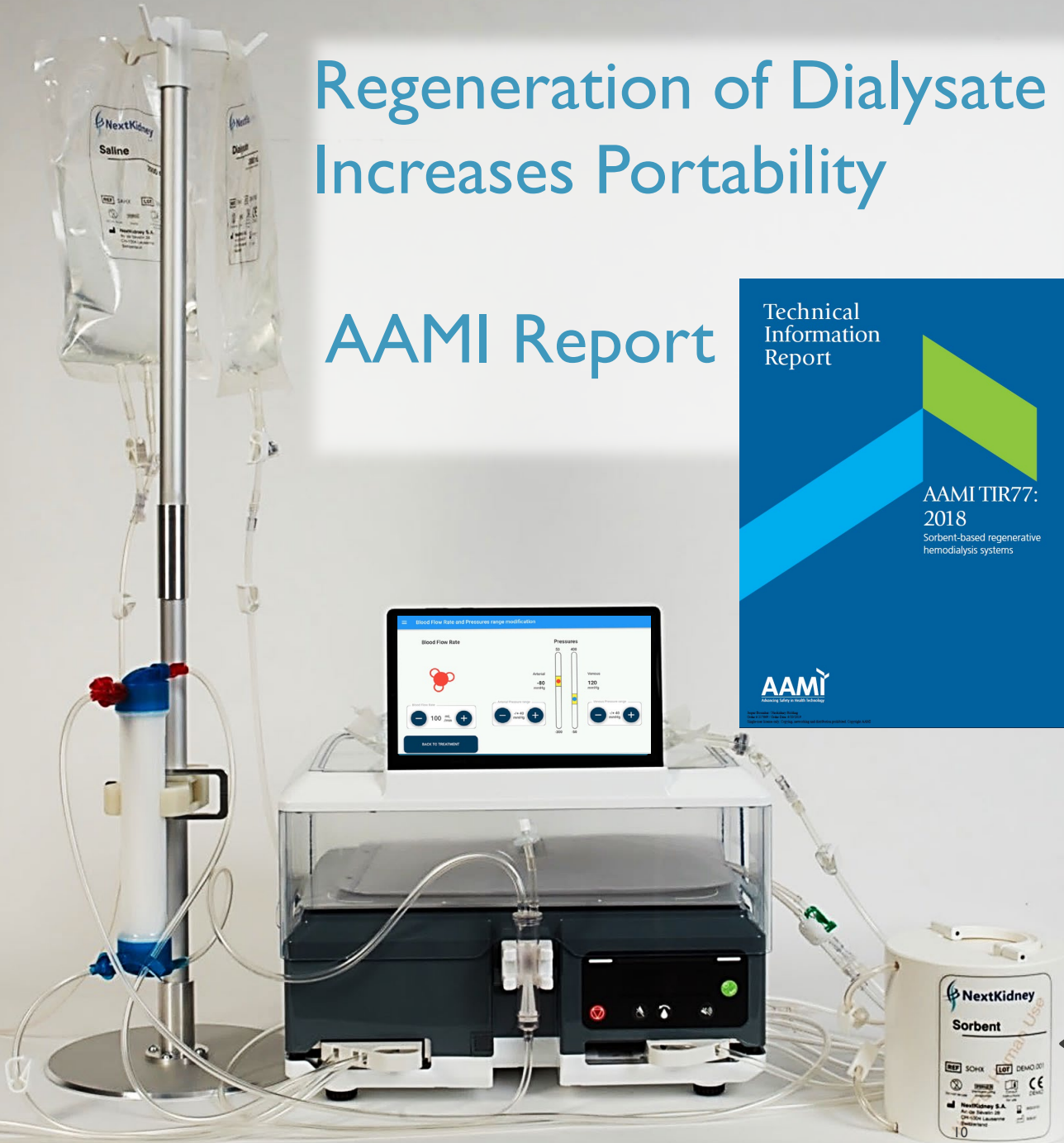
Regeneration of Dialysate Increases Portability

AAMI Report



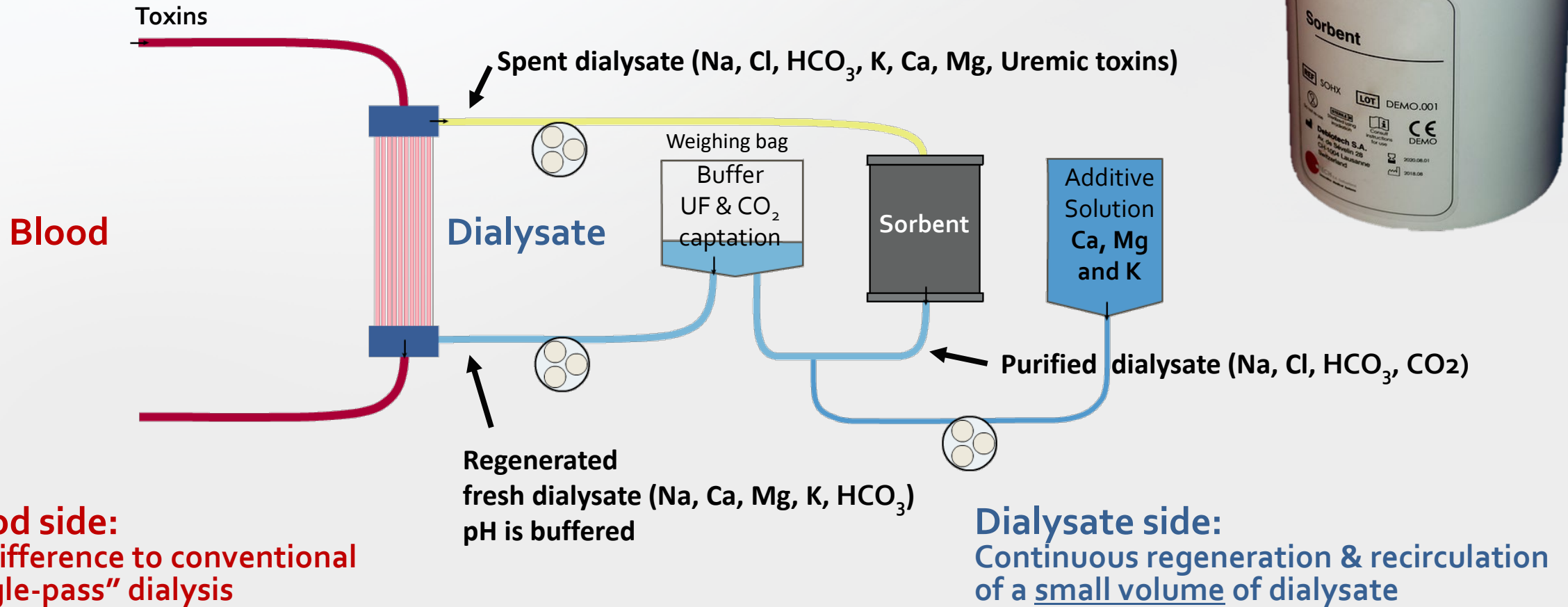
NeXtkidney

- Suited for various HD regimes: frequent short daily to nocturnal
- Dialysate: 5L for short daily
- Double Isolated (110/220V)
Full Cardiac Floating (no earth)
- No electrician or plumber needed to modify the home
- Telecommunication & monitoring
- Efficiency comparable with existing HD machines
- Fits in carry-on trolley!
- Sorbent is the secret...



j.augustin@nextkidney.com

Sorbent dialysis: Principle



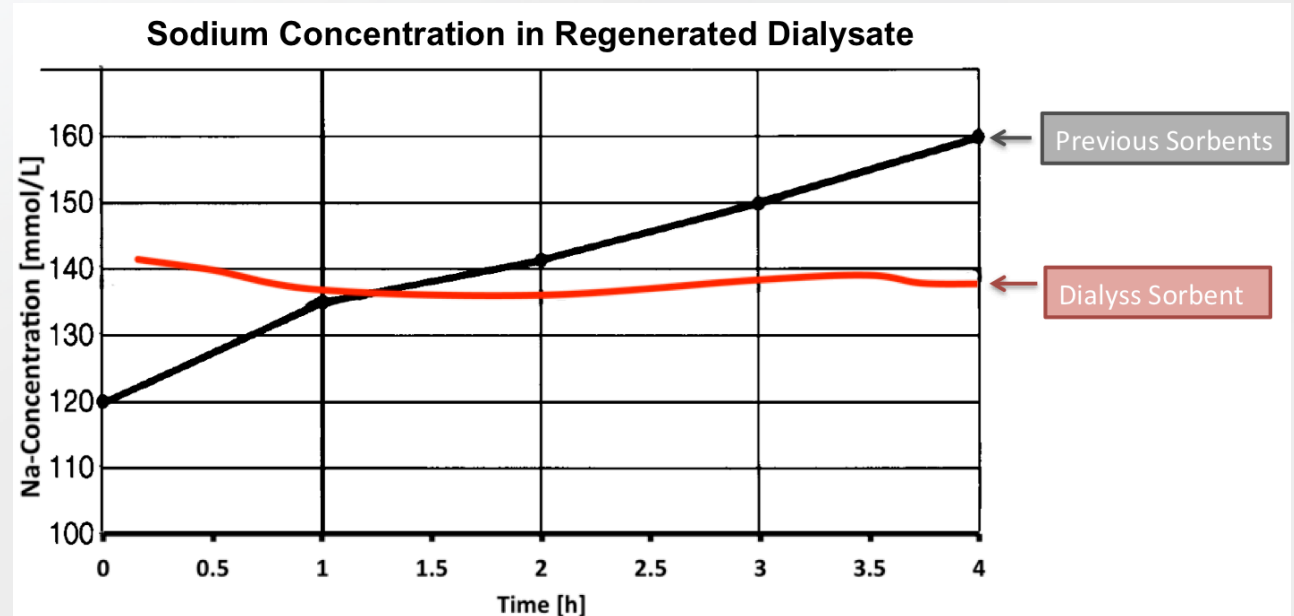
j.augustin@nextkidney.com

Unique New Sorbent System



Sodium-Neutral Sorbent Technology

- Previous sorbent systems showed undesired Na^+ increase
- Dialyss sorbent is the first sorbent to overcome this historic limitation, thanks to unique ion exchange properties
- This makes it the first **regenerative** hemodialysis system **complying to** the strict requirements of today's industry standard for HD devices, **IEC60601-2-16 + AAMI TIR77**





National University Hospital Singapore

Clinical investigators Sorbent Cartridges

← Dr. Titus Lau & Dr. Sabrina Haroon Wong Peixin →



NUH Singapore

Sorbent test with patients

- Blood circuit: normal HD machine
- Dialysate circuit: supplied with Sorbent Regenerated Dialysate





University Hospital Caen (France)

← Dr. Maxence Ficheux



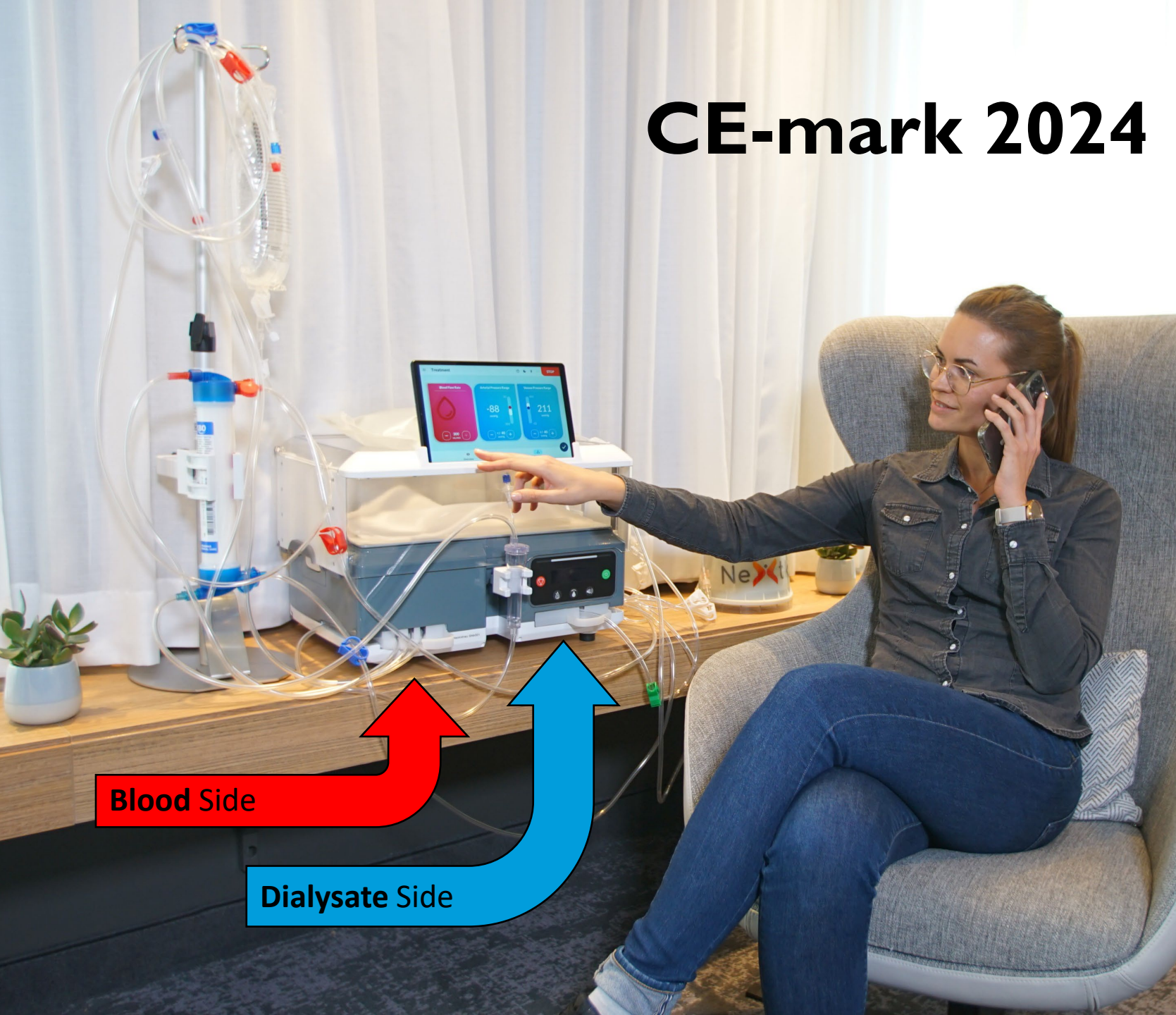


University Medical Centre Utrecht (Netherlands)

← Dr. Karin Gerritsen



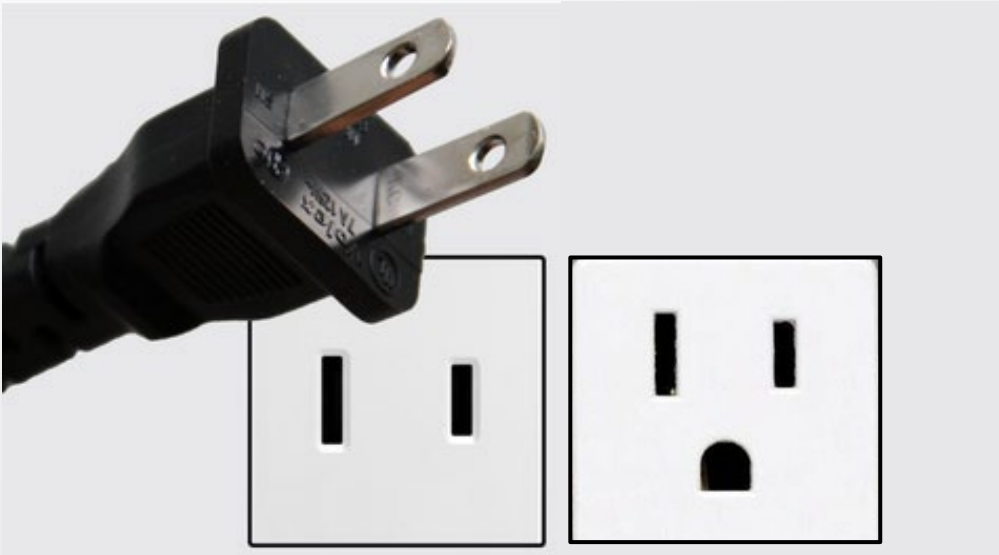
CE-mark 2024



No Plumber or Electrician needed to modify home

Double isolated: Does not rely on grounding for safety

- **Directly meets IEC60601-1-11 home care devices standard. Fully Cardiac Floating!**



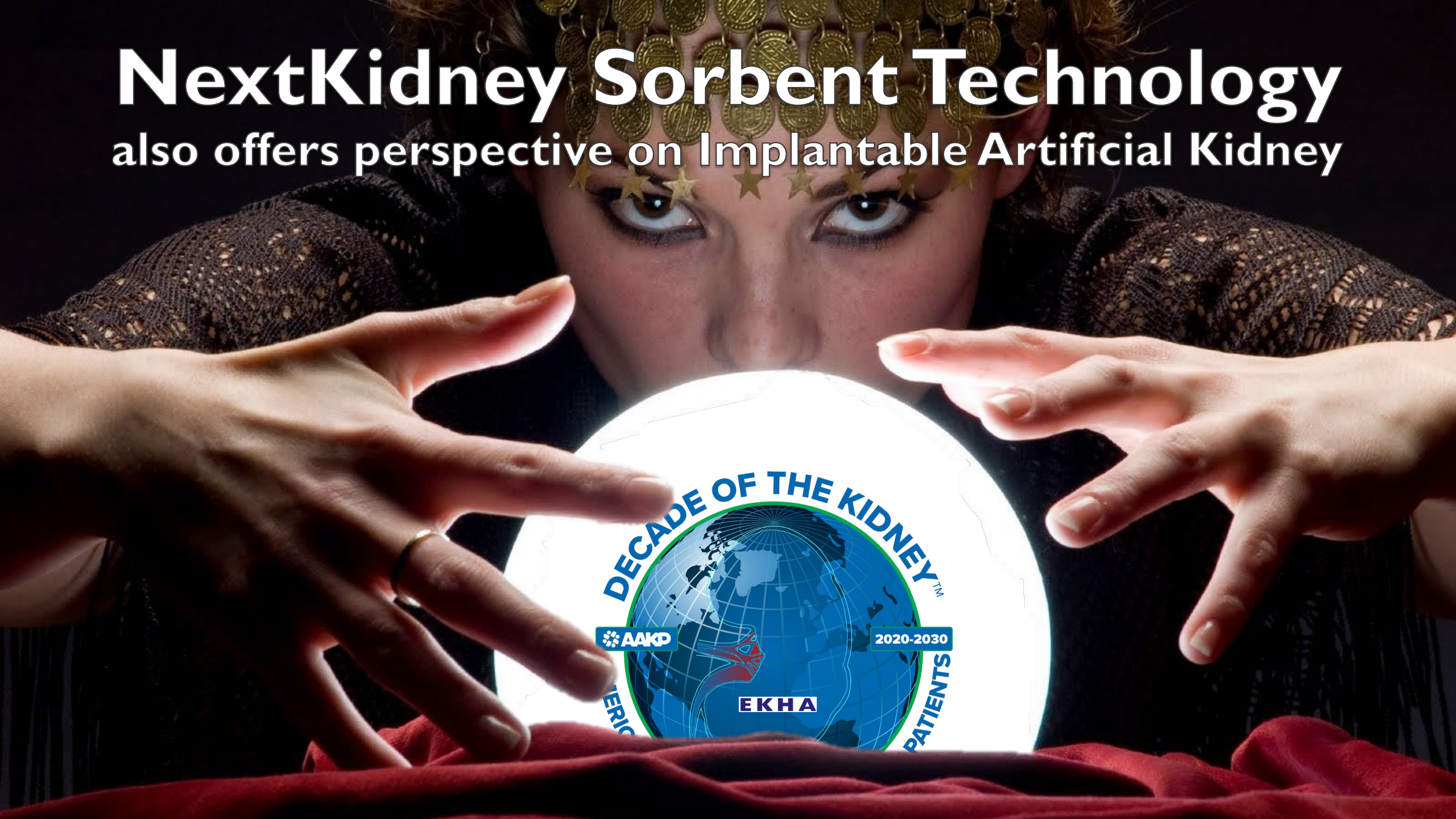
Always fits in US & Japan



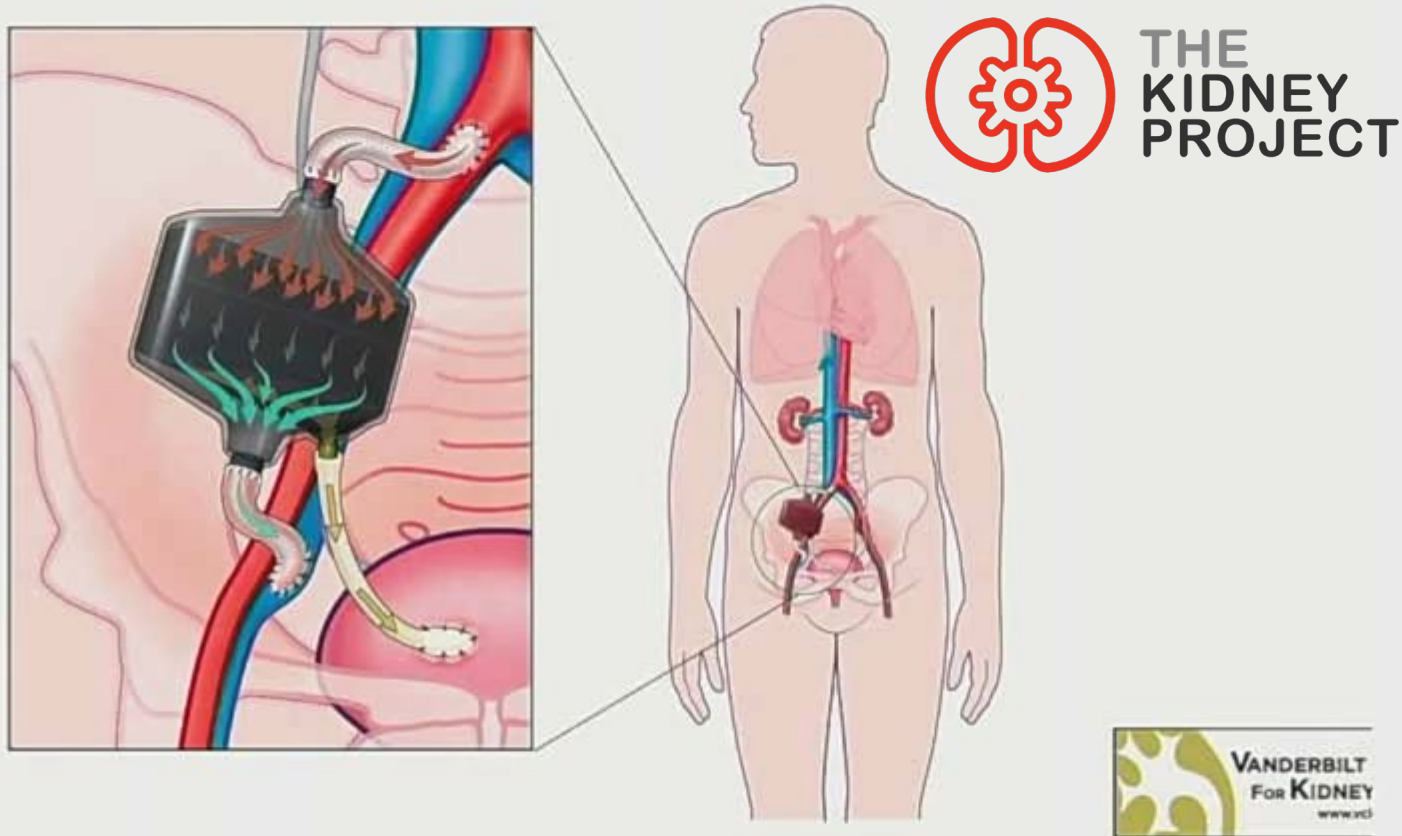
Always fits throughout European Union

NextKidney Sorbent Technology

also offers perspective on Implantable Artificial Kidney



Medical Moonshot: Universal Donor Kidney



William H. FISSELL (Nashville, USA)

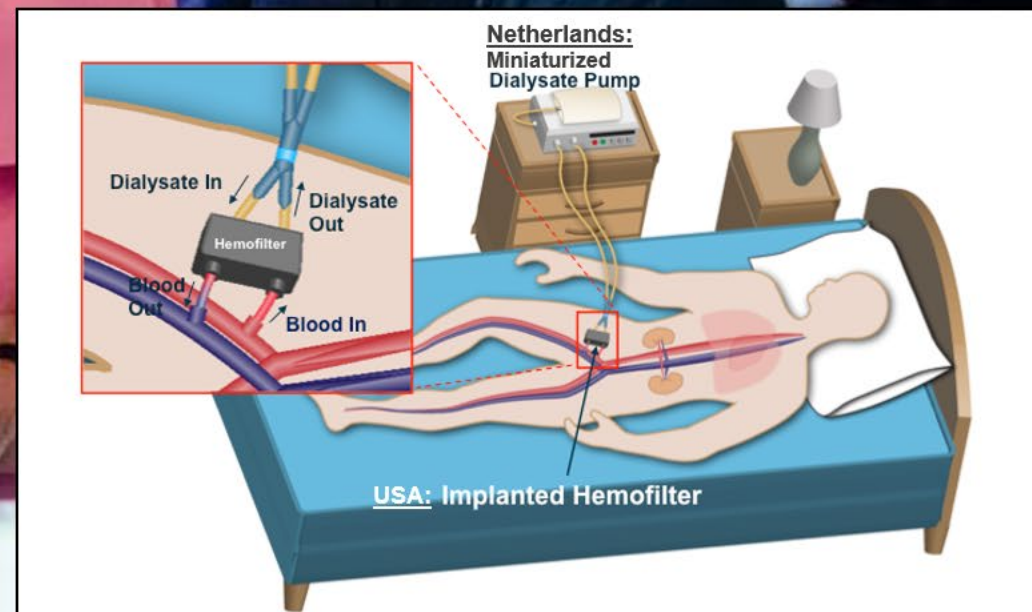
Current Status in Wearable and Implantable Artificial Kidneys

Dutch Queen visits “*Kidney Project*” San Francisco

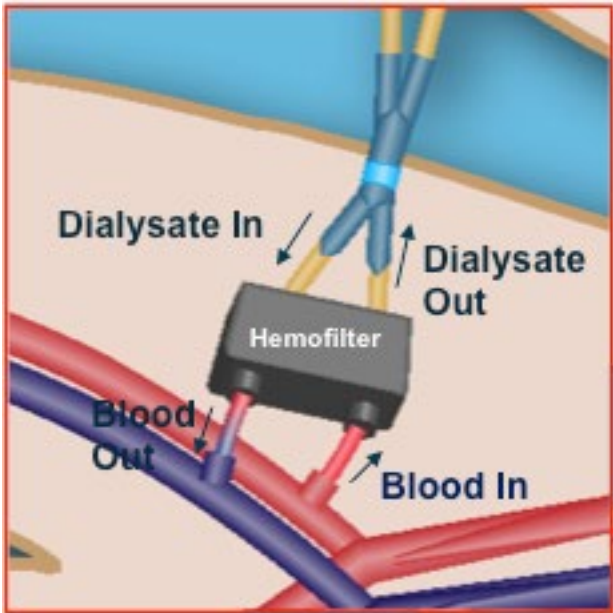


I would like
to work with
NeXtkidney

Silicon Chip
Dialysis Filter

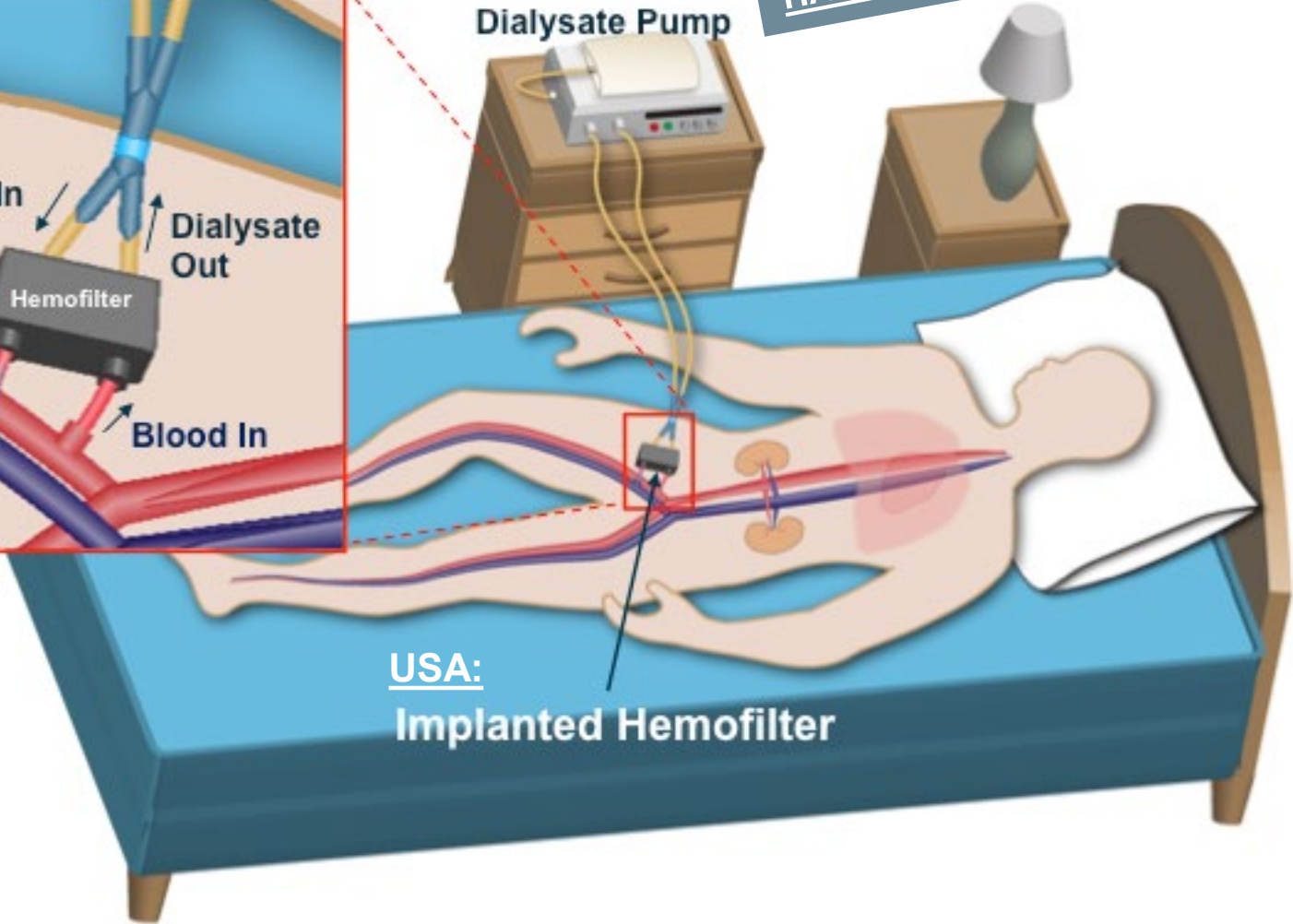


i-Hemo: Si-Chip Implantable Hemofilter



Miniaturized
Dialysate Pump

NeXtkidney
HALF of HD "suitcase" !

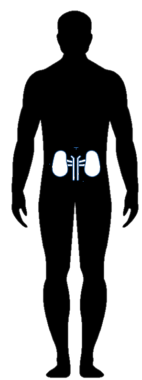


USA:
Implanted Hemofilter



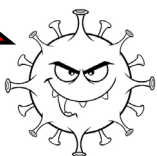
Proposal submitted to





transplantation

immune suppression



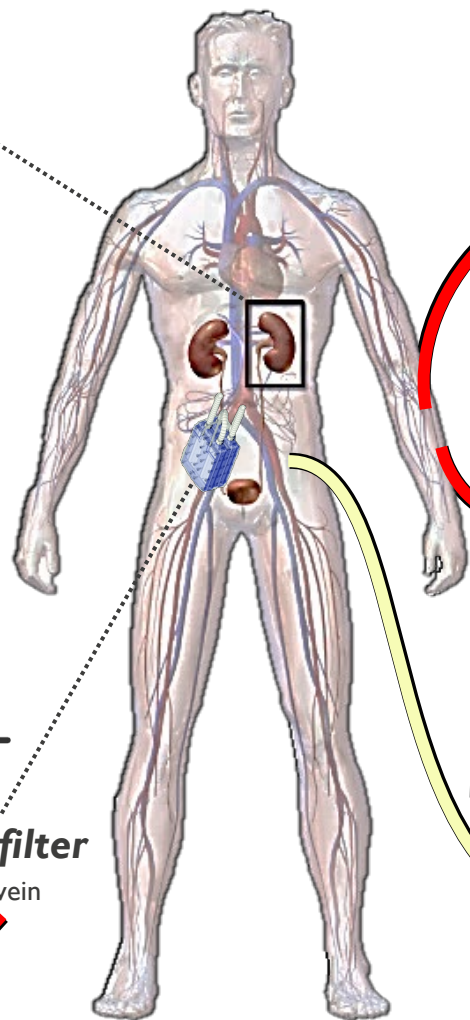
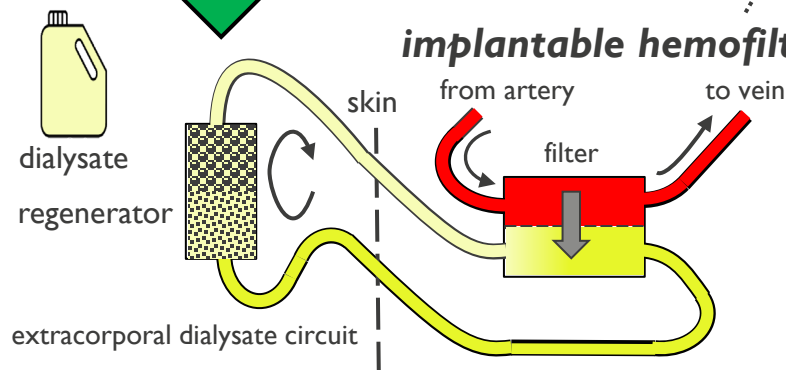
NO dialysate

NeXtkidney

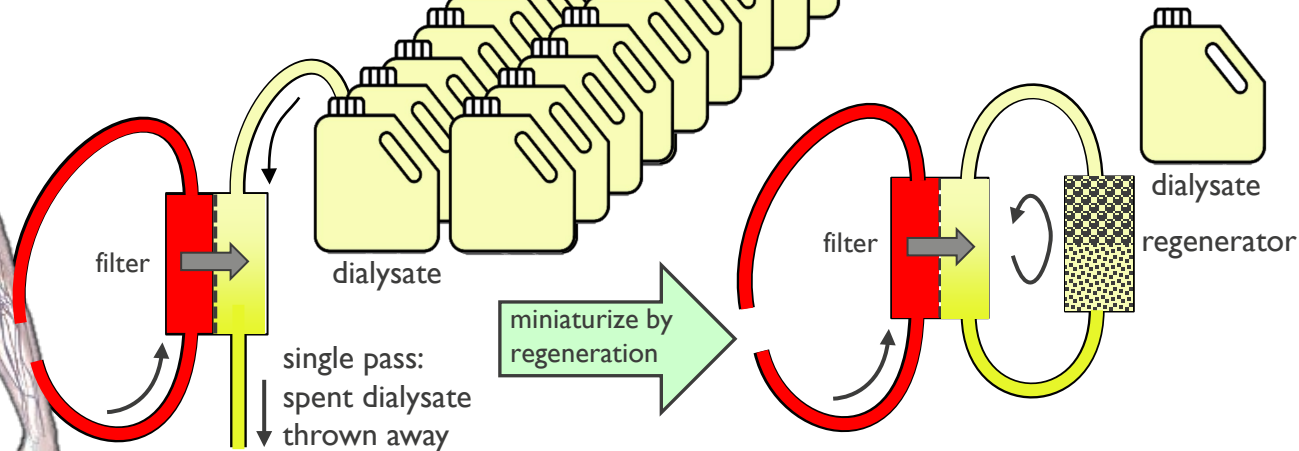


THE KIDNEY PROJECT

implantable hemofilter

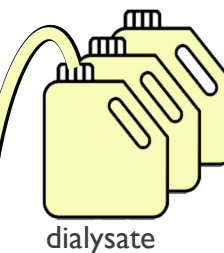


hemodialysis



NeXtkidney

portable hemodialysis



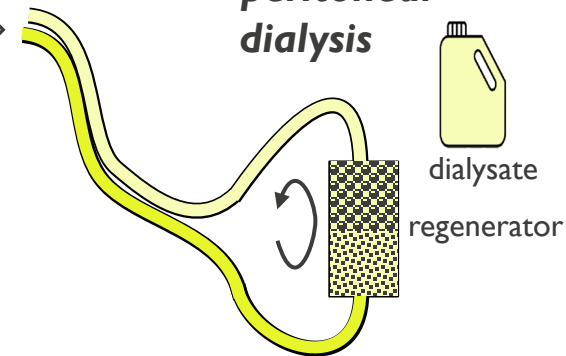
dialysate

peritoneal dialysis

single pass:
spent dialysate
thrown away

miniaturize by
regeneration

wearable peritoneal dialysis



Bundle the Best Brains to Build Better Treatments

