Physiologas Technologies

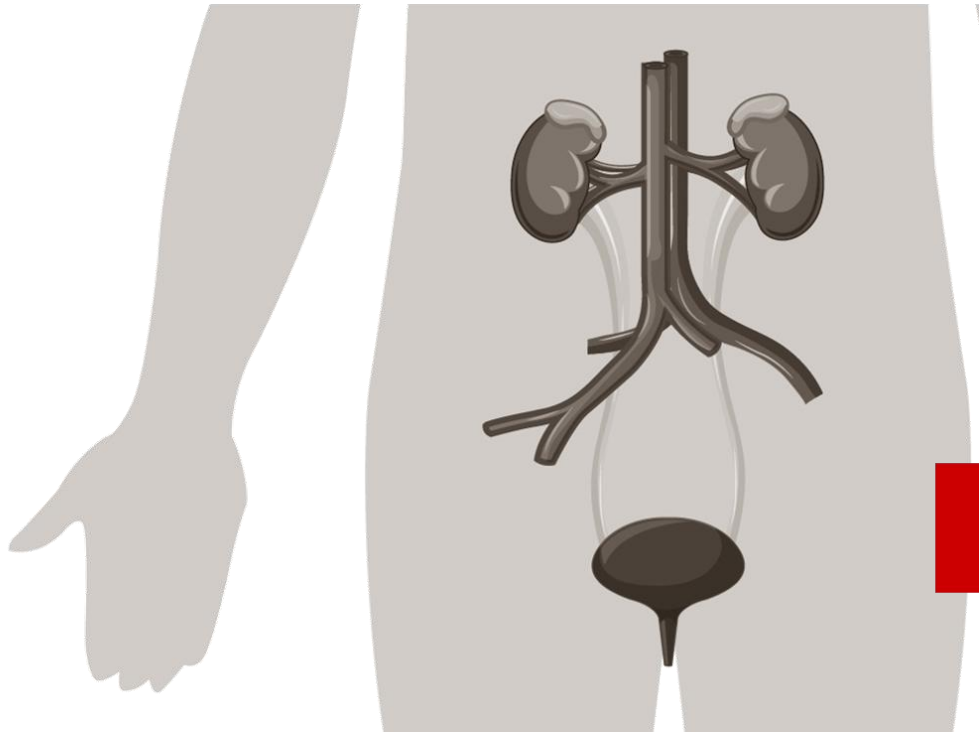
Freedom and dignity for patients
with kidney disease

Kaz Miyawaki | ceo@physiologas.com

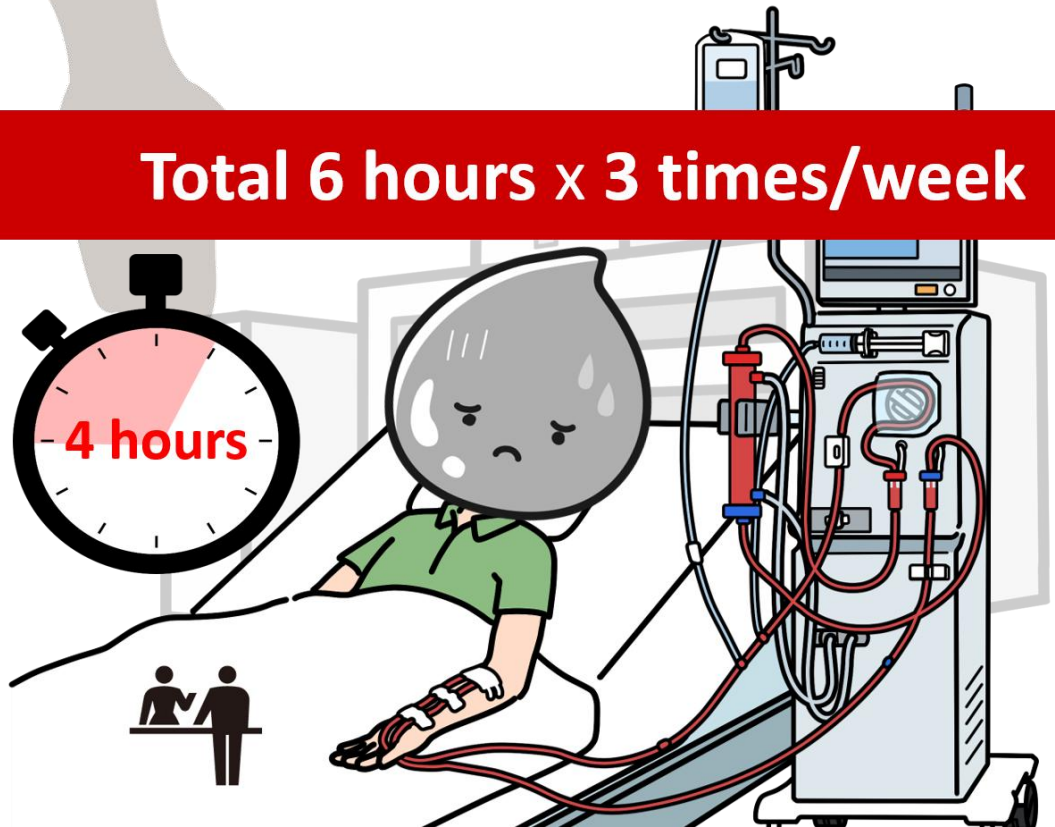
Patients taking treatment mostly rely on “In-Center” Hemodialysis

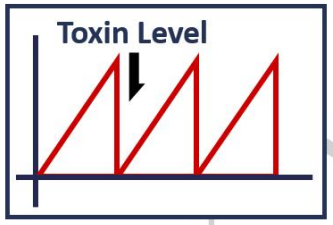
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More than **10 millions ESRD patients**



Total 6 hours x 3 times/week



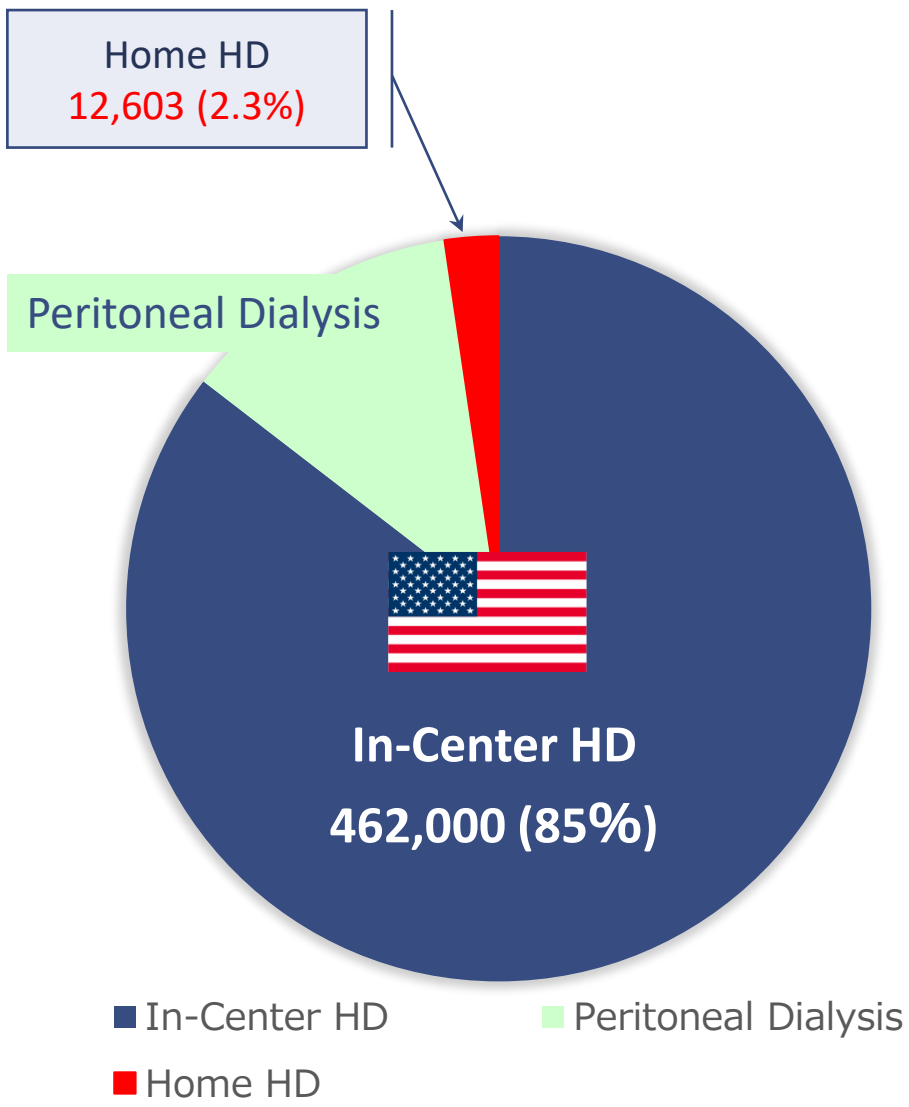


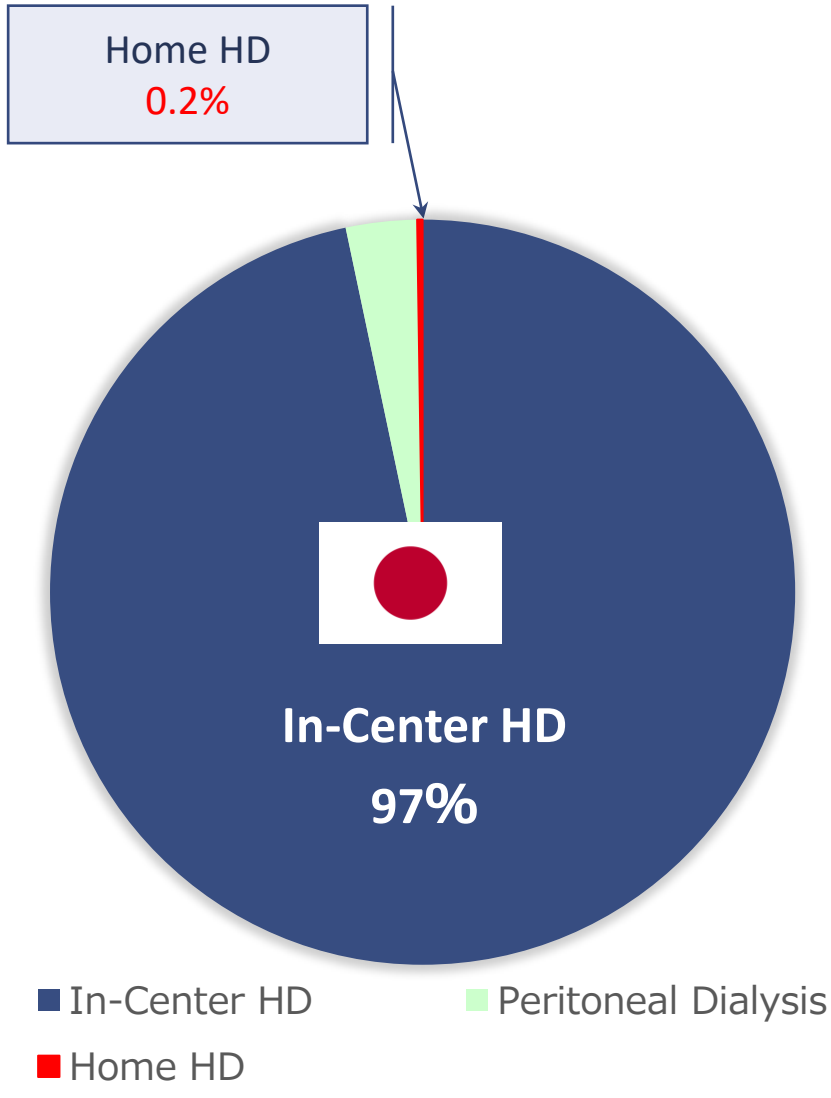






Only a few % of hemodialysis treatment is done “in-home”

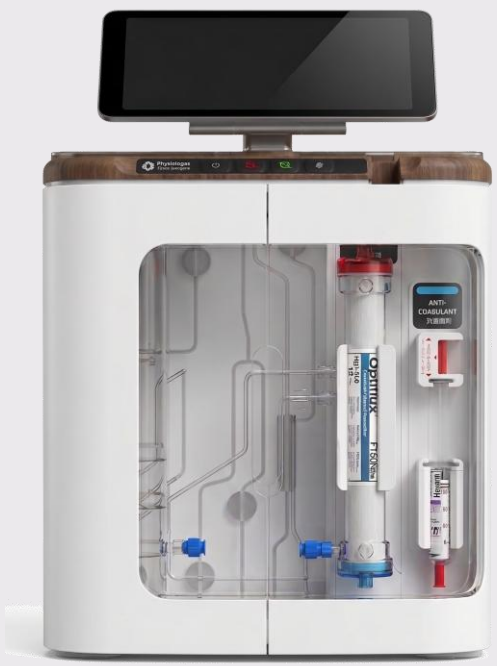




* Figures in 2021, USRDS 2023 Annual Report

* Figures in 2023, Journal of Japanese Society for Dialysis Therapy. 57 (12) : 543-620, 2024.
JSDT Renal Data Registry.

Next Generation Hemodialysis In-Home



Render

Compact

No need for water supply

Easy

Plug-in only

No daily cleaning

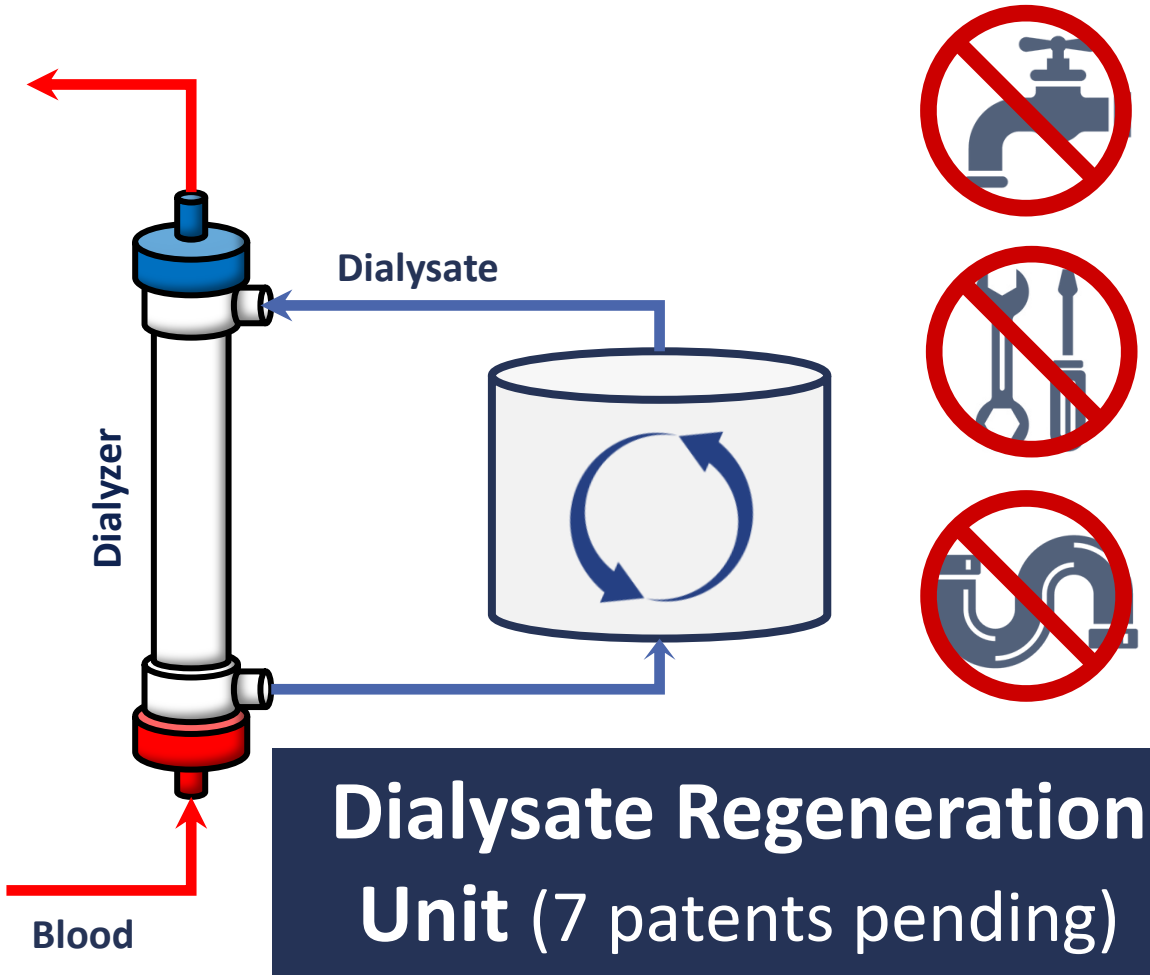
Safe

Real-time analyzer
Removes only unnecessary substances



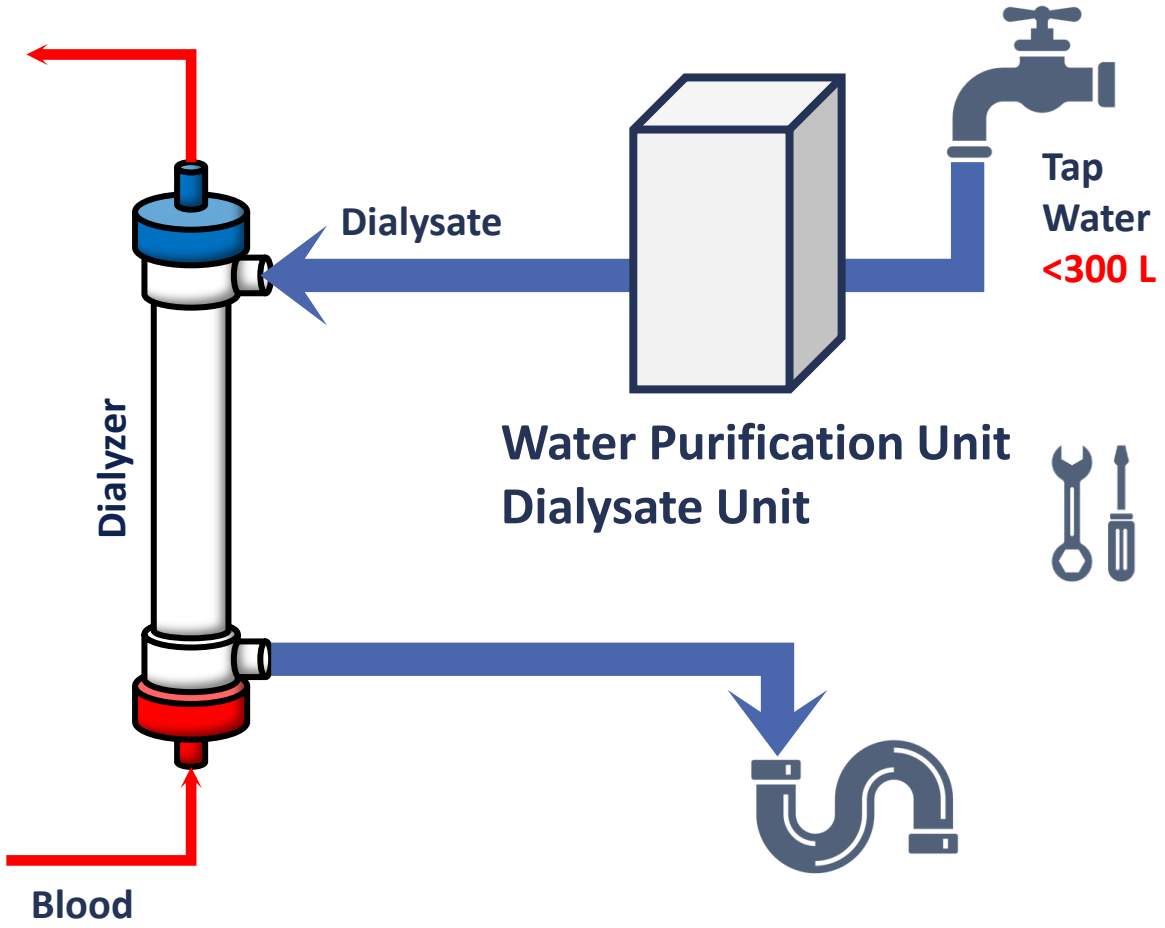
Physiologas Difference – No Water Supply, We Recycle Dialysate

Physiologas System

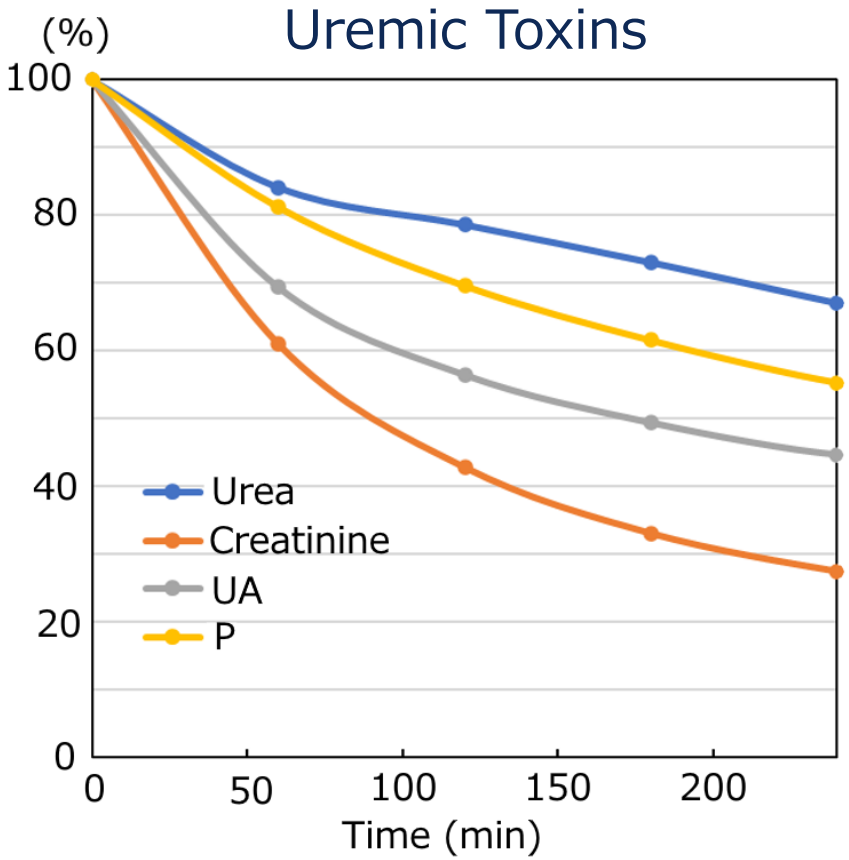


Dialysate Regeneration Unit (7 patents pending)

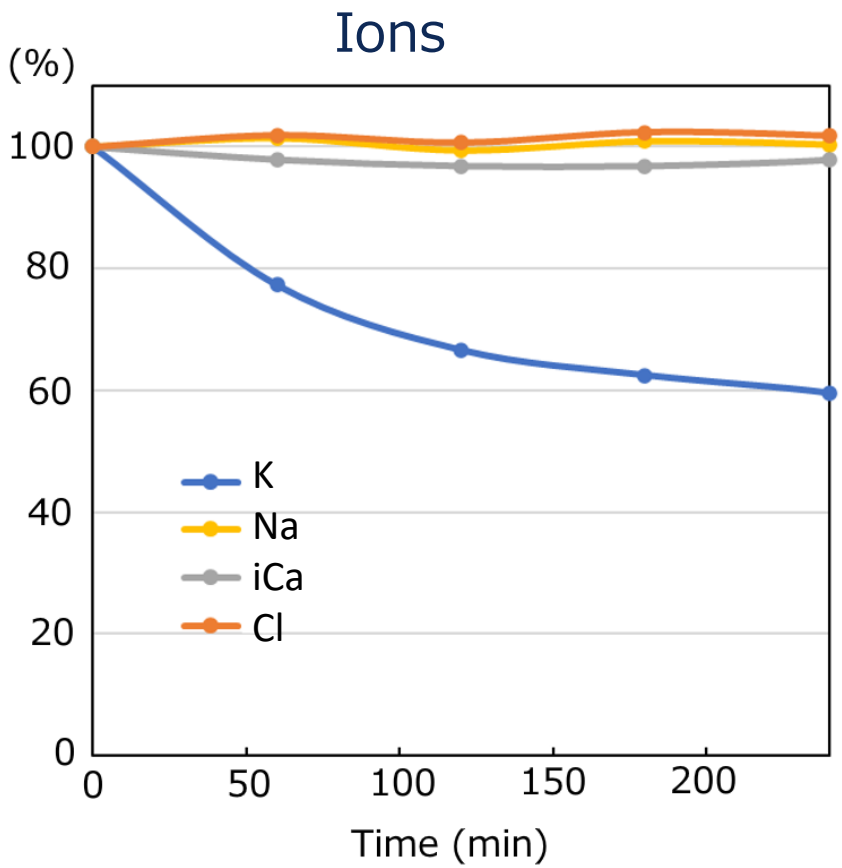
Conventional System



Rate of removal of each substance in a single treatment.



Urea, creatinine, uric acid, phosphorus, are removed.



Potassium (K) are removed.

Other ions (Na, iCa, Cl) remained at constant levels.

Cost effective, convenient treatment

Patients & Family



Quality of Life

Free from visiting clinics
Able to work for fulltime
Back to normal social life

Physicians & Centers



Profitability / Efficacy

Public Incentive (TPNIES)
Less CAPES per patient
No admin & treatment

Government



Economic & Social Impact

Patients back to workforce
& Social life

Competitive Advantages

No plumbing required; Compact, portable and patient-friendly



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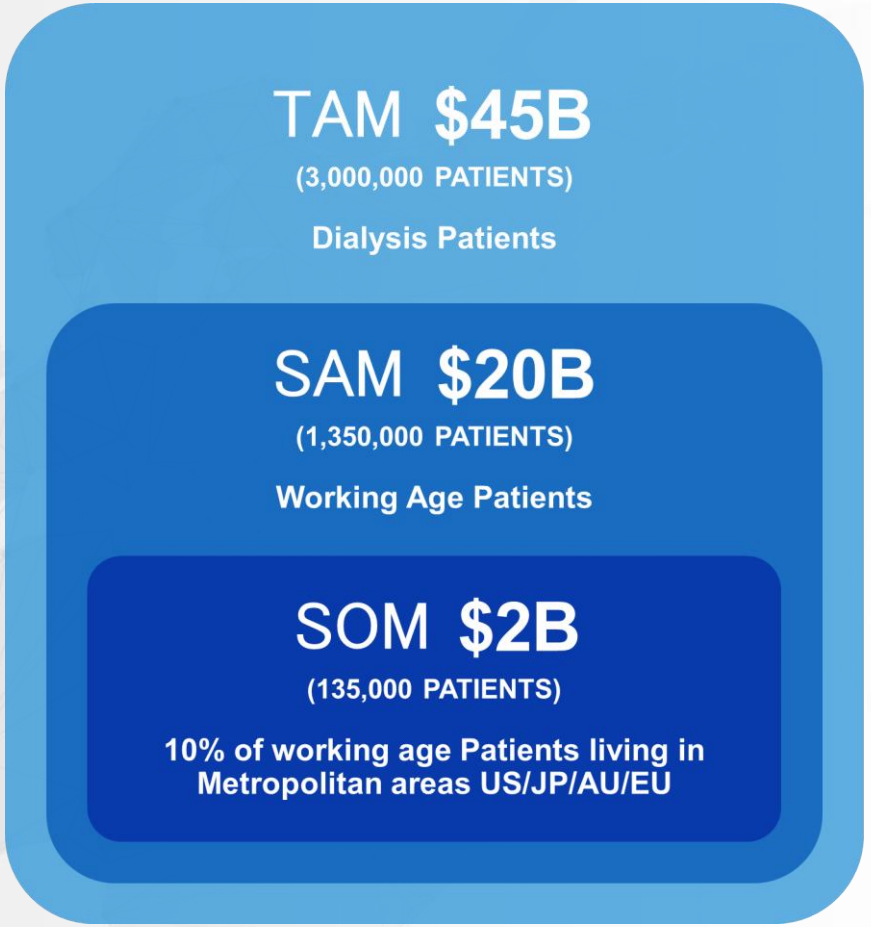


NxSTAGE®



.Outset

Scaling clinic-free dialysis for global adoption



Global Dialysis Patients **3 million people** (2017)

45% of dialysis patients are younger than 65yrs old
1.35 million patients
Target: 10% of working age
=>**135,000** Patients

Our sales of consumables
1 patients = $100/treatment
150 treat/yr = $15,000
3,000,000 patients = **$45B**
1,350,000 patients = **$20B**
135,000 patients = **$2B**

Roadmap



2020-23	2024	2027	2028	2029	2030	2030-
Engineering Lab Tests	**Proof of Principle** Live Animal Tests	**Proof of Concept** Non-Clinical Tests	**Prototype** Clinical Trial	FDA 510(k) MDR/PMDA	Product Launch	Growth Exit
Raised 4.4MM USD	Fundraising 5MM USD + Grant 5MM USD	10MM USD		15MM USD		

Management Team & Advisors / Supporters

Physiologas Technologies



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Air Liquide
大幸薬品

CEO
Kaz MIYAWAKI, MSc



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北里大学 KITASATO UNIVERSITY

CTO
Kenichi KOKUBO, Ph.D



法政大学 HOSEI University
PHC
AsahiKASEI 旭化成メディカル

R&D GM
Seiichi FUKAI, M.Eng.



CE JACE

R&D Lead
Hiroyuki AOKI
Clinical Engineer



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京都大学 KYOTO UNIVERSITY
LOTTE
NASA

Director
Joon PAEK, Ph.D., MBA



Director
Kensei SUMITA
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大阪大学 OSAKA UNIVERSITY
NEDO 国立研究開発法人 新エネルギー・産業技術総合開発機構



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SUS
CBIRD Empower Your Love!
PRIME ROAD



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Kumi SAKURAI
早稲田大学 WASEDA University
Abbott
PREMO



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大幸薬品
SUS

MEDTECH ACTUATOR
Capgemini
AMDAP
UC San Diego INSTITUTE FOR THE GLOBAL ENTREPRENEUR
DEEP TECH PIONEERS hello tomorrow
WE AT
JETRO
J-StarX

ASK



$ 10MM
(Equity + Grant)
$ 8MM Secured

Complete prototype for
non-clinical and clinical tests.
Non-clinical tests.



Giving Dialysis Patients
Back Their LIFE

Physiologas Technologies Inc.

CEO Kaz MIYAWAKI
代表取締役 宮脇一嘉

ceo@physiologas.com