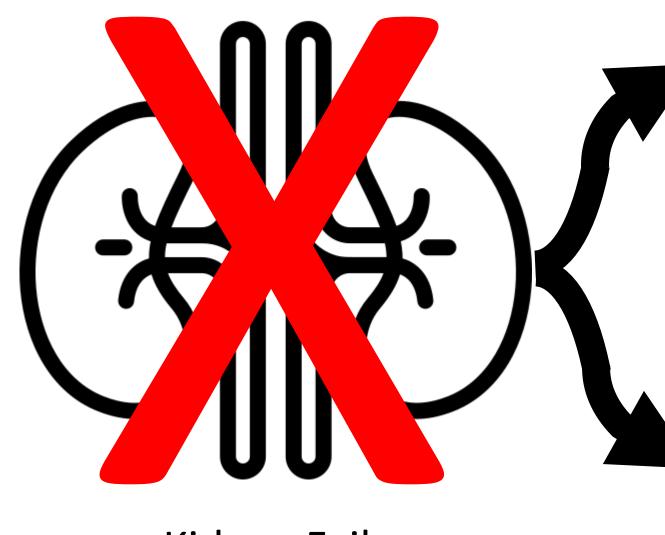
The world urgently needs drastically better Kidney Replacement Therapies!

Kidney Failure: Present therapies are inadequate!



Transplantation

Best & cheapest available KRT option, **but**:

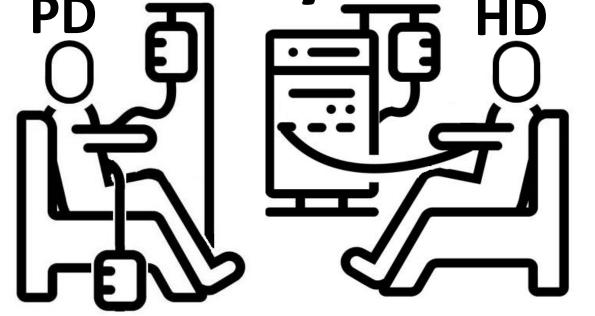
- Structural Shortage of Transplant Kidneys
- Immune suppression drugs prevent transplant rejection but also increase Risk of Cancer & Infections
- 25% of patients are medically unfit for transplantation
- Up to 25% shorter remaining Life Expectancy

Dialysis

Most widely used available KRT option, **but**:

Substitutes max 10-15% of kidney filtration function

Kidney Failure is also known as: End Stage Kidney Disease **No KRT? You Die!**



- Does not substitute all other kidney functions
- Significantly lower Quality of Life than Transplantation
- More Expensive & Resource-heavy than Transplantation
- Up to 70% shorter remaining Life Expectancy

Dialysis is associated with... Low Quality of Life **High Cost to Society High Mortality** 00000000 مە Health-related Quality of Life Dialysis is resource-heavy, Annual death risk for dialysis patients is

L 27% – **49**%

costing up to **€80,000** or **\$89,000** of dialysis patients is -100x

worse than for the general population per patient per year, depending on the country and dialysis method

higher than in general population

of patients die without KRT access

Billion/y

Covid-19 makes

it even worse!

5-year survival

on dialysis is

lower

than for most

cancer treatments

World-Wide Costs Keep Rising Unsustainably! KRT Projections **•** 14.5* Yearly Dialysis Cost & Country Wealth 9.1 million Σ get no treatment 9.7 **\$ 1.7 Bn/y**, low/lower income by 2030 **9.7 Bn/y**, upper-middle income Б 5.4 **\$45.7 Bn/y**, high income countries Ŭ 110 Patient 2.6 \$57.1 Billion/y

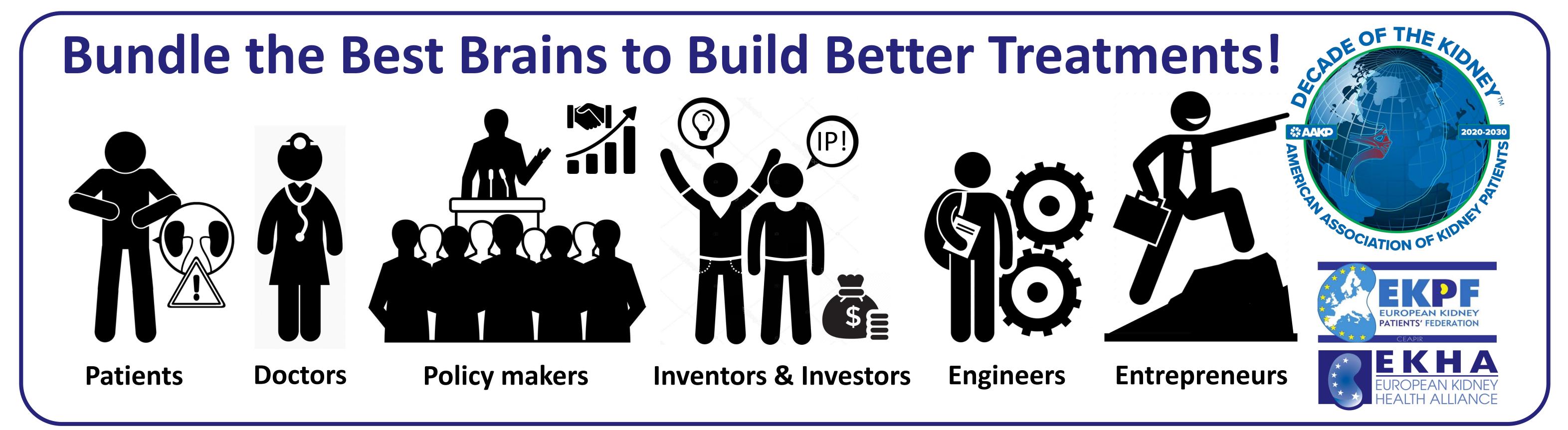
Reproduced from: Van der Tol et al. An International Analysis of Dialysis Services Reimbursement Clin J Am Soc Nephrol 14: 84–93, 2019

Patients with access to KRT Those dying without access to KRT

2010

* Himmelfarb J, et al. The current and future landscape of dialysis. Nature Reviews Nephrology (2020) Oct;16(10):573-585. doi: 10.1038/s41581-020-0315-4

2030



spent in 2016

(note: excl. transplants & AKI)