



Leading European Nephrology

Transplantation Versus Home Dialysis. Should I Stay on It or Should I Go for It?

Miklos Z Molnar, MD, PhD, FERA, FASN Associate Professor of Medicine Division of Nephrology, Department of Medicine University of Tennessee Health Science Center Memphis, TN, USA

Disclosure

- Czech Health Research Council
- National Institute of Health (NIH) USA

Objectives

| 1 | Select Modality for your Tx Candidate |
|---|--------------------------------------------------------------------------------|
| 2 | Home/Extended HD versus conventional HD |
| 3 | Home HD versus Kidney Transplantation |
| 4 | Unpublished Results for Comparison of Home HD versus Kidney Transplantation |
| 5 | Conclusions |

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Your patient

- 65 years old retired policeman with 20 years history of diabetes and diabetic nephropathy with eGFR 12 ml/min.
- No detected CAD, PVD, COPD. 25% stenosis in both carotis arteries and HTN
- On regular medications (Insulin, ACEI (still), Aspirin, Statin)
- Unremarkable physical
- AV access is ready for use, Hgb, PTH, Ca, P are on target
- Doing daily workout, history of steroid induced psychosis
- Eligible for kidney transplantation, no living donor
- Excellent adherence, good diabetes and HTN control
- Excellent living condition, good candidate for HHD
- He decided to go with HHD when he is offered a kidney...

- Living donor kidney from altruistic donor as end of the chain he is the recipient from the list.
- Donor is 55 years old, White, male.
- 2 arteries.
- No DSA.

- SCD donor kidney.
- Donor is 50 years old, White, female, cause of death: accident.
- No contributory donor information.
- No DSA.

- ECD donor kidney.
- Donor is 65 years old, African American, male, cause of death: cerebrovascular accident.
- CIT would be around 23 hours, donor was on vasopressors, donor has history of HTN, IFG.
- Estimated GFR is around 70 ml/min, good diuresis.
- One DSA- Class II.

- DCD donor kidney.
- Donor is 45 years old, African American, female, cause of death: motor vehicle accident.
- Donor is treated HCV positive, previous drug user
- Estimated GFR is around 60 ml/min.
- One DSA- Class I.

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AJKD Original Investigation

Home Hemodialysis and Mortality Risk in Australian and New Zealand Populations

Mark R. Marshall, MBChB, MPH(Hons), FRACP,^{1,2,3} Carmel M. Hawley, MB,BS(Hons), MMedSci, FRACP,^{4,5} Peter G. Kerr, MB,BS, PhD, FRACP,^{6,7} Kevan R. Polkinghorne, BHB, MBChB, MClinEpi, PhD, FRACP,^{6,7} Roger J. Marshall, PhD,¹ John W.M. Agar, MB,BS, FRCP(Lond), FRACP,^{3,8} and Stephen P. McDonald, MB,BS(Hons), PhD, FRACP^{3,9}

We also of Mandallin and Mandallin .

AJKD, 2011, 58(5): 782-793

Home Hemodialysis and Mortality Risk

| nded Peritoneal Dialysis |
|------------------------------------------------|
| |
| |
| 36) ^a 1.07 (1.02-1.11) ^a |
| 68) ^a 1.10 (1.06-1.16) ^a |
| 77) ^a 1.18 (1.13-1.23) ^a |
| |
| 26) ^a 0.80 (0.73-0.87) ^a |
| .90) ^a 0.93 (0.88-1.00) |
| 82) ^a 0.99 (0.94-1.04) |
|). |

- 26,016 patients from Australia and New Zealand
- Transplant Registry Analysis
- Lack of socioeconomic, medication and laboratory data



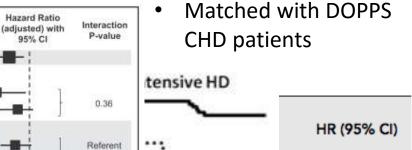
Intensive Hemodialysis Associates with Improved Survival Compared with Conventional Hemodialysis

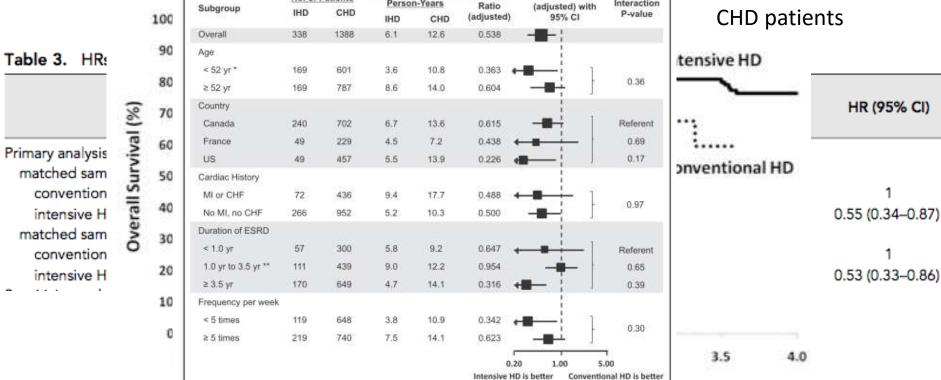
Gihad E. Nesrallah,*[†] Robert M. Lindsay,* Meaghan S. Cuerden,* Amit X. Garg,*^{†‡} Friedrich Port,[§] Peter C. Austin,[¶] Louise M. Moist,*[‡] Andreas Pierratos,** Christopher T. Chan,** Deborah Zimmerman,^{††} Robert S. Lockridge,^{‡‡} Cécile Couchoud,^{§§} Charles Chazot,^{III} Norma Ofsthun,¹¹ Adeera Levin,*** Michael Copland,*** Mark Courtney,^{†††} Andrew Steele,^{‡‡‡} Philip A. McFarlane,** Denis F. Geary,** Robert P. Pauly,^{†††} Paul Komenda.^{§§§} and Rita S. Suri*

No. of Patients

JASN, 2012, 23: 696-705

338 (from 420) propensity score matched HHD patients from France, Canada and US





Hazard

Event Rate per 100

Person-Years

Figure 3. Subgroup analyses for matched cohorts (unadjusted). P values for interac-

tions are based on z tests. IHD, intensive hemodialysis; CHD, conventional hemodi- Ilysis. Two-sided Figure alysis; MI, myocardial infarction; CHF, congestive heart failure. *Median age at cohort P=0.0 hemodialysis. entry is 52 years. **Median duration of ESRD at cohort entry is 3.5 years.

Survival in Daily Home Hemodialysis and Matched Thrice-Weekly In-Center Hemodialysis Patients

Eric D. Weinhandl,* Jiannong Liu,* David T. Gilbertson,* Thomas J. Arneson,* and Allan J. Collins*[†]

*Chronic Disease Research Group, Minneapolis Medical Research Foundation, Minneapolis, Minnesota; and [†]Department of Medicine, University of Minnesota, Minneapolis, Minnesota JASN, 2012, 23: 895-904

1,873 propensity score
 matched HHD patients
 from US

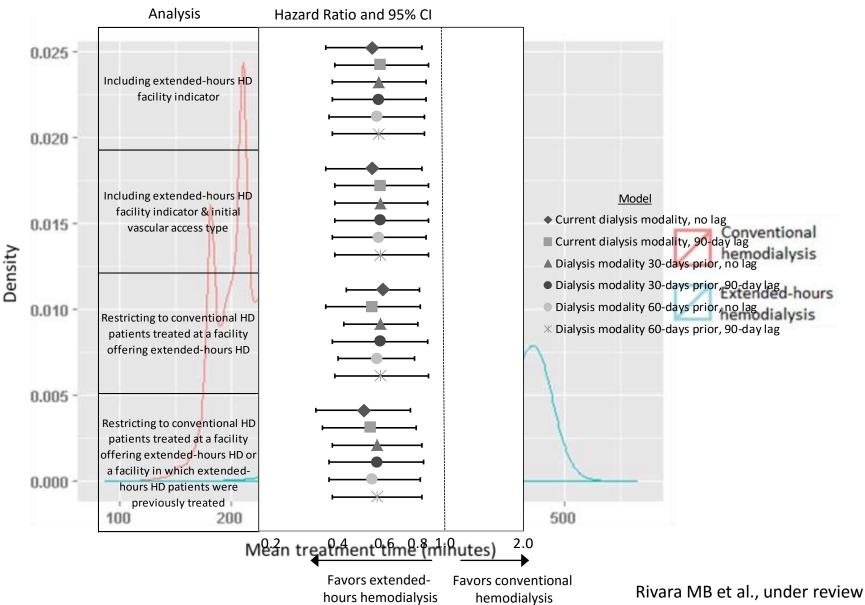
1:5 matched with 9,365 CHD patients

Table 2. Relative hazards of death for daily home hemodialysis patientsin intention-to-treat and as-treated analyses

| | Intention to T | reat | As Treated | | | |
|----------------------------------|------------------|-------|------------------|--------|--|--|
| | HR (95% CI) | Р | HR (95% CI) | P | | |
| All-cause mortality | 0.87 (0.78–0.97) | 0.01 | 0.82 (0.72–0.94) | <0.01 | | |
| Cause-specific mortality | | | | | | |
| cardiovascular disease | 0.92 (0.78–1.09) | 0.34 | 0.83 (0.67–1.01) | 0.06 | | |
| infection | 1.13 (0.84–1.53) | 0.41 | 1.17 (0.83–1.66) | 0.38 | | |
| cachexia/dialysis withdrawal | 0.63 (0.41–0.95) | 0.03 | 0.70 (0.44–1.11) | 0.13 | | |
| other specified cause | 1.06 (0.81–1.37) | 0.69 | 1.19 (0.88–1.61) | 0.25 | | |
| unknown cause | 0.59 (0.44–0.79) | <0.01 | 0.41 (0.28–0.62) | <0.01 | | |
| Interval-specific mortality (mo) | | | | | | |
| 1–6 | 0.88 (0.78–0.98) | 0.02 | 0.77 (0.68–0.89) | <0.01 | | |
| 7–12 | 0.89 (0.78–1.02) | 0.10 | 0.75 (0.63–0.89) | < 0.01 | | |
| 13–18 | 0.92 (0.78–1.09) | 0.32 | 0.81 (0.65–1.01) | 0.06 | | |
| 19–24 | 0.95 (0.76–1.20) | 0.69 | 0.89 (0.66–1.21) | 0.45 | | |
| ≥25 | 0.92 (0.66–1.28) | 0.61 | 0.95 (0.62–1.47) | 0.82 | | |

Referent: matched thrice-weekly in-center patients.

Effect of Extended-Hours Hemodialysis on Survival of Patients with End-Stage Renal Disease in US



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Nephrol Dial Transplant (2009) 24: 2915–2919 doi: 10.1093/ndt/gfp295 Advance Access publication 7 July 2009

Nephrology Dialysis Transplantation

Survival among nocturnal home haemodialysis patients compared to kidney transplant recipients

Robert P. Pauly¹, John S. Gill², Caren L. Rose², Reem A. Asad³, Anne Chery⁴, Andreas Pierratos⁵ and Christopher T. Chan³

Table 1. Baseline characteristics of nocturnal haemodialysis patients and recipients of deceased and living donor transplantation

| | NHD (<i>n</i> = 177) | DTX (n = 531) | LTX $(n = 531)$ | P-value ^a |
|------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------|----------------------------------------------|----------------------|
| Mean age: years (standard deviation) | 46.4 (11.8) | 46.9 (12.2) | 43.9 (13.3) | < 0.001 |
| Female (%) | 62 (35.0) | 224 (42.2) | 228 (42.9) | 0.16 |
| Race (%) | | · · · · · · · · · · · · · · · · · · · | | |
| White | 121 (68) | 363 (68) | 363 (68) | Matched |
| Black | 20 (11) | 60 (11) | 60 (11) | Matched |
| Asian | 18 (10) | 54 (10) | 54 (10) | Matched |
| Other | 18 (10) | 54 (10) | 54 (10) | Matched |
| Cause of ESRD (%) | | | N Z | 00000000 |
| Diabetes | 24 (14) | 72 (14) | 72 (14) | Matched |
| Other | 153 (86) | 459 (86) | 459 (86) | Matched |
| Comorbidities (%) ^b | 577 (137 | Contraction of the second | 1. T. C. | 1000000000000000 |
| Previous history of cancer | 11 (6.2) | 2 (0.4) | 1 (0.2) | < 0.001 |
| Peripheral vascular disease | 7 (4.0) | 0(0) | 2 (0.4) | < 0.001 |
| Ischaemic heart disease | 21 (11.9) | 6 (1.1) | 2 (0.4) | < 0.001 |
| Mean duration of conventional dialysis prior to treatment with NHD, DTX or LTX: years (standard deviation) | 2.5 (3.6) | 2.4 (3.6) | 2.2 (2.7) | 0.98 |
| Vintage strata: number of subjects (%) | | | | |
| No time on dialysis | 25 (14.1) | 75 (14.1) | 75 (14.1) | Matched |
| 0-6 months | 36 (20.3) | 108 (20.3) | 108 (20.3) | Matched |
| 6-12 months | 24 (13.6) | 72 (13.6) | 72 (13.6) | Matched |
| 12-24 months | 25 (14.1) | 75 (14.1) | 75 (14.1) | Matched |
| 24-36 months | 18 (10.2) | 54 (10.2) | 54(10.2) | Matched |
| 36-60 months | 23 (13.0) | 69 (13.0) | 69 (13.0) | Matched |
| >60 months | 26 (14.7) | 78 (14.7) | 78 (14.7) | Matched |

- Canadian HHD from two centers in Toronto
- US Tx recipients

NHD, nocturnal haemodialysis; DTX, decease donor transplantation; LTX, living donor transplantation.

^aThe P-value for comparison of all three groups (NHD, DTX, LTX).

^bComorbidities as recorded at the start of ESRD.

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Nephrology Dialysis Transplantation

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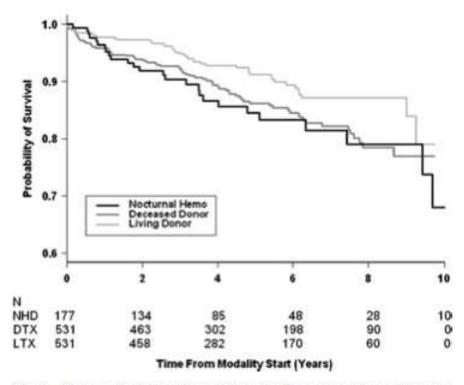


Fig. 1. Time to death in patients treated with nocturnal haemodialysis, deceased and living donor kidney transplantation (log-rank test, P = 0.03).

Table 3. Association of treatment modality with death

| | HR ^a | 95% confidence interval | P-value |
|--------------------------|-----------------|----------------------------|---------|
| NHD (Reference group) | 1 | | |
| DTX | 0.87 | 0.50, 1.51 | 0.61 |
| LTX | 0.51 | 0.28, 0.91 | 0.02 |

HR, hazard ratio; NHD, nocturnal haemodialysis; DTX, decease donor transplantation; LTX, living donor transplantation.

Hazard ratios from Cox multivariable regression.

^aHR: hazard ratio; adjusted for age at NHD start or transplantation, gender, history of ischaemic heart disease/peripheral vascular disease/cancer, study year and duration of conventional dialysis treatment prior to treatment with treatment modality of interest.

LTX demonstrated the best survival benefit. Because treatment assignment was not random and the follow-up was relatively short, these results are not definitive. However, our findings suggest that survival equivalent to DTX may

Survival and Hospitalization for Intensive Home Hemodialysis Compared with Kidney Transplantation

Karthik K. Tennankore,* S. Joseph Kim,^{†‡} Heather J. Baer,^{§||1} and Christopher T. Chan[†]

*Division of Nephrology, Dalhousie University, Halifax, Nova Scotia, Canada; [†]Division of Nephrology, University Health Network, University of Toronto, Toronto, Ontario, Canada; [‡]Division of Nephrology, St. Michael's Hospital, University of Toronto, Toronto, Ontario, Canada; [§]Division of General Medicine and Primary Care, Brigham and Women's Hospital, Boston, Massachusetts; ^{II}Harvard Medical School, Boston, Massachusetts; and ^{II}Department of Epidemiology, Harvard School of Public Health, Boston Massachusetts

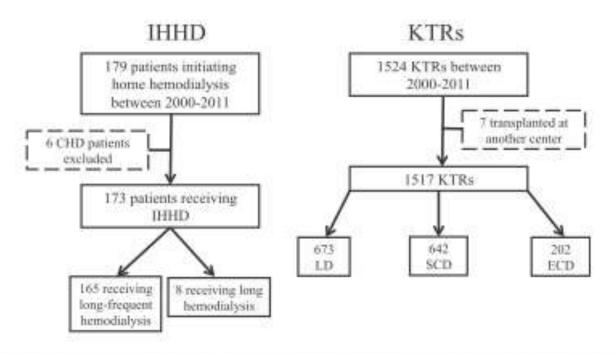


Figure 1. Derivation of study cohort. CHD, conventional in-center hemodialysis; KTR, kidney transplant recipient. *J Am Soc Nephrol.* 2014;25(9):2113-2120

- From one center in Toronto, Ontario, Canada
- Relatively young patients
- The primary outcome
 of this study was
 time-to-treatment
 failure or death for
 IHHD patients
 compared with kidney
 transplant recipient
 subtypes
- 285 events

J Am Soc Nephrol. 2014;25(9):2113-

| Characteristic | IHHD (n=173) | LD (n=673) | SCD (n=642) | ECD (n=202) |
|-------------------------------|----------------|---------------|---------------|---------------|
| Age (yr) | 45±13 | 46±13 | 48±12 | 59±10 |
| Caucasian | 119 (69) | 524 (78) | 428 (67) | 117 (58) |
| Men | 107 (62) | 394 (59) | 410 (64) | 138 (68) |
| Active smoker ^a | 29 (17) | 67 (10) | 60 (9) | 25 (12) |
| Dialysis vintage ^b | 0.3 (0.2-1.7) | 1.2 (0.2-2.6) | 4.7 (3.0-6.7) | 4.1 (3.1-5.9) |
| Dialysis vintage>3 mo | 107 (62) | 492 (73) | 630 (98) | 202 (100) |
| Cause of ESRD | | | | |
| Diabetes | 27 (16) | 123 (18) | 228 (36) | 64 (32) |
| Polycystic kidney disease | 17 (10) | 95 (14) | 62 (10) | 21 (10) |
| Hypertension/ischemic | 12 (7) | 41 (6) | 57 (9) | 22 (11) |
| GN | 66 (38) | 253 (38) | 181 (28) | 69 (34) |
| Comorbidities ^c | 0-6-0-06000000 | | | |
| Coronary artery disease | 20 (12) | 93 (14) | 141 (22) | 61 (30) |
| Congestive heart failure | 21 (12) | 22 (3) | 25 (4) | 15 (7) |
| Diabetes | 44 (25) | 159 (24) | 274 (43) | 82 (41) |
| Cerebrovascular disease | 10 (6) | 18 (3) | 35 (5) | 14 (7) |
| Peripheral vascular disease | 12 (7) | 43 (6) | 38 (6) | 30 (15) |
| Non-skin cancer | 26 (15) | 29 (4) | 22 (3) | 7 (3) |
| Chronic lung disease | 6 (3) | 34 (5) | 40 (6) | 15 (7) |

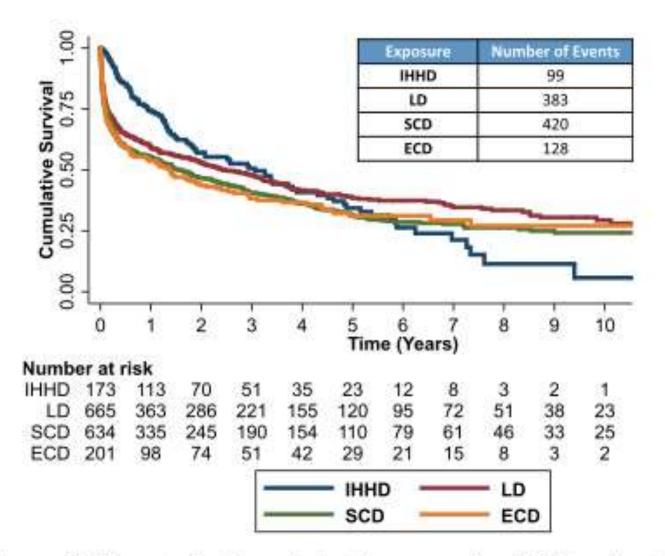
Table 1. Baseline characteristics of study cohort

Data are presented as the mean ± SD, n (%), or median (interquartile range).

^aData on smoking status were missing for 43 patients (coded as nonsmoker).

^bThere were 24 patients (1.4%) who had missing values imputed.

^oThere were 27 patients who were missing one or more comorbidities.



J Am Soc Nephrol. 2014;25(9):2113-2120

Figure 3. Time to first hospitalization comparing IHHD patients and kidney transplant recipient subtypes (LD, SCD, and ECD recipients). Log-rank P=0.01.

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nts Value

0.001 0.001 0.001

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*Division of Nephrology, Dalhousie University, Halifax, Nova Scotia, Canada; [†]Division of Nephrology, University Health Network, University of Toronto, Toronto, Ontario, Canada; [‡]Division of Nephrology, St. Michael's Hospital, University of Toronto, Toronto, Ontario, Canada; [§]Division of General Medicine and Primary Care, Brigham and Women's Hospital, Boston, Massachusetts; ^{II}Harvard Medical School, Boston, Massachusetts; and ^{II}Department of Epidemiology, Harvard School of Public Health. Boston Massachusetts

Table 3. Rate of admission, duration of admission, and IRRs comparing IHHD patients and kidney transplant recipient subtypes

| | Advetation | Admission | | | 1–3 mo | | 3–12 mo | >12 mo | | |
|-----------------|-----------------------|-----------|------------------------|------|-----------------------|------|---------------------|--------|---------------------|--|
| | Admission | n/yr | IRR (95% CI) | n/yr | IRR (95% CI) | n/yr | IRR (95% CI) | n/yr | IRR (95% CI) | |
| | Rate ^a | | | | | | | | | |
| | Unadjusted | | | | | | | | | |
| | IHHD | 0.21 | 1.00 (ref) | 0.38 | 1.00 (ref) | 0.43 | 1.00 (ref) | 0.35 | 1.00 (ref) | |
| | LD | 2.95 | 15.10 (4.81 to 47.41) | 1.28 | 4.04 (1.78 to 9.14) | 0.58 | 1.39 (0.93 to 2.10) | 0.20 | 0.57 (0.42 to 0.77) | |
| | . SCD | 3.58 | 19.02 (6.04 to 59.93) | 1.68 | 5.94 (2.59 to 13.65) | 0.84 | 2.27 (1.48 to 3.49) | 0.31 | 0.96 (0.71 to 1.30) | |
| able 2. Relat | ECD | 3.35 | 18.03 (5.58 to 58.31) | 2.03 | 6.76 (2.82 to 16.19) | 0.66 | 1.76 (1.02 to 3.02) | 0.29 | 0.89 (0.62 to 1.27) | |
| | Fully adjusted | | | | | | | | | |
| | - IHHD | | 1.00 (ref) | | 1.00 (ref) | | 1.00 (ref) | | 1.00 (ref) | |
| rimary analysis | LD | | 15.16 (4.83 to 47.62) | | 5.31 (2.35 to 11.99) | | 1.45 (0.93 to 2.25) | | 0.64 (0.47 to 0.87) | |
| IHHD | SCD | | 18.77 (5.86 to 60.12) | | 7.29 (3.12 to 17.01) | | 2.07 (1.31 to 3.27) | | 0.96 (0.69 to 1.34) | |
| LD | ECD | | 16.39 (4.91 to 54.74) | | 7.87 (3.10 to 19.99) | | 1.53 (0.86 to 2.72) | | 0.80 (0.54 to 1.19) | |
| | Duration ^b | | | | | | | | | |
| SCD | Unadjusted | | | | | | | | | |
| ECD | IHHD | 1 | 1.00 (ref) | 2 | 1.00 (ref) | 2 | 1.00 (ref) | 3 | 1.00 (ref) | |
| | LD | 19 | 18.16 (10.96 to 32.57) | 9 | 4.30 (3.34 to 5.64) | 5 | 2.11 (1.87 to 2.40) | 1 | 0.23 (0.21 to 0.24) | |
| | SCD | 26 | 25.42 (15.36 to 45.55) | 15 | 6.78 (5.27 to 8.87) | 8 | 3.59 (3.18 to 4.07) | 2 | 0.47 (0.45 to 0.50) | |
| | ECD | 31 | 29.98 (18.01 to 53.96) | 17 | 7.83 (6.03 to 10.33) | 7 | 2.85 (2.50 to 3.27) | 1 | 0.33 (0.30 to 0.36) | |
| | Fully adjusted | | | | | | | | | |
| | IHHD | | 1.00 (ref) | | 1.00 (ref) | | 1.00 (ref) | | 1.00 (ref) | |
| | LD | | 27.33 (10.08 to 74.13) | | 6.89 (3.13 to 15.17) | | 1.86 (1.04 to 3.33) | | 0.30 (0.16 to 0.58) | |
| | SCD | | 30.43 (11.30 to 81.99) | | 11.11 (4.95 to 24.94) | | 2.55 (1.41 to 4.60) | | 0.51 (0.26 to 1.00) | |
| | ECD | | 32.47 (11.04 to 95.47) | | 12.33 (5.04 to 30.16) | | 1.92 (0.92 to 3.98) | | 0.21 (0.09 to 0.54) | |

Data are presented by different time periods after treatment initiation, and are adjusted for age, sex, race, dialysis vintage, era of treatment initiation, cause of ESRD, active smoking status, diabetes, coronary artery disease, congestive heart failure, cerebrovascular disease, peripheral vascular disease, chronic lung disease, and non-skin malignancy.

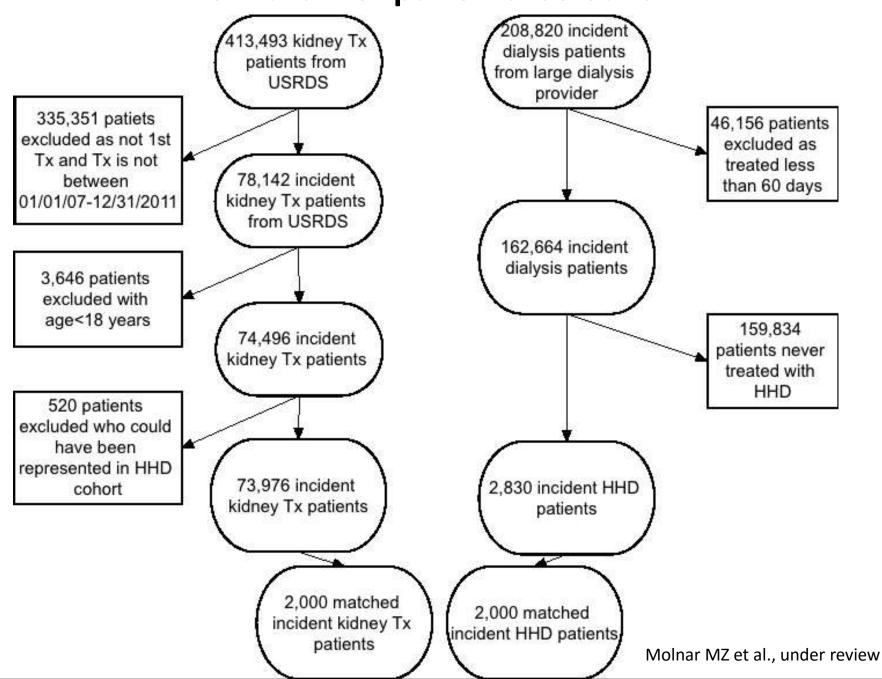
^aRate of admission is standardized to number of admissions per year.

^bDuration of admission is standardized to number of days per year.

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Flow chart of patients' selection

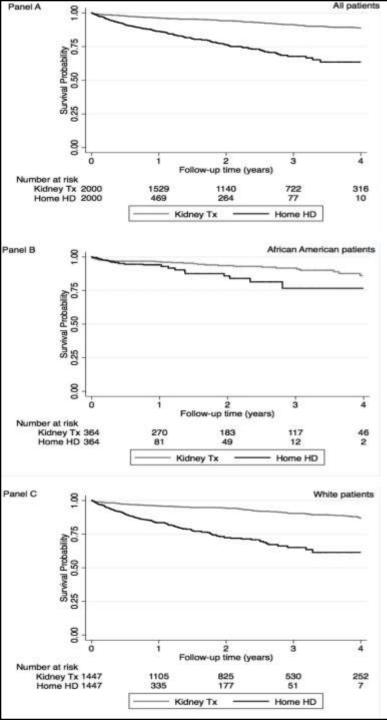


Baseline characteristics of the unmatched and the 1:1 propensity

score-matched cohort

| 3 | African Americans | | | | | | | Whites | | | | | |
|------------------------------------------------------------------------|-------------------|----------------|--------|----------------------|---------------|---------------|------------------|---------------|---------------|------------------------|----------------|---------------|--|
| | Unmatched | | | | Matched | | -) | Unmatche | d | r | Matched | | |
| | Home HD (n | KTx (n = | Std. | Home HD (n=364 | KTx (n=364 | Std. Diff. | Home HD (n | KTx (n= | Std. Diff. | Home HD (n=1,447 | KTx (n=1.44 | Std. Diff. | |
| | =585) | 19,268) | | (1) |) | | =1,961) | 46,884) | Contract |) | 7) | | |
| Chronic Obstructive Pulmonary Disease | 6 | 0.7 | 0.282 | 3 | 4 | -0.015 | 6 | 1 | 0.252 | 5 | 5 | -0.003 | |
| Access Type at time of Home HD initiation/time of KTx (%) | | | | | | | | | | | | | |
| AV Fistula | 57 | 10 | 1,168 | 46 | 46 | 0 | 56 | 12 | 1.042 | 48 | 48 | 0.007 | |
| AV Graft | 13 | 2 | 0.411 | 13 | 13 | -0.016 | 7 | 1 | 0.287 | 5 | 6 | -0.018 | |
| CVC Catheter | 16 | 32 | -0.365 | 22 | 22 | -0.013 | 20 | 32 | -0,270 | 24 | 24 | 0.013 | |
| Other | 0 | 0.6 | -0.109 | 0 | 0 | 0 | 0.6 | 0.05 | -0.093 | 0.07 | 0 | 0.037 | |
| Unknown Cause of ESRD (%) | 13 | 55 | -1.001 | 19 | 18 | 0.028 | 16 | 54 | -0.850 | 21 | 22 | -0.013 | |
| Diabetes | 31 | 30 | 0.024 | 37 | 36 | 0.023 | 36 | 32 | 0.094 | 37 | 35 | 0.032 | |
| Hypertension | 37 | 35 | 0.039 | 32 | 36 | -0.081 | 18 | 15 | 0.078 | 17 | 19 | -0.038 | |
| Glomerulonephrit is | 20 | 17 | 0.084 | 20 | 19 | 0.021 | 17 | 20 | -0.058 | 17 | 16 | 0.026 | |
| Cystic kidney disease | 2 | 3 | -0.060 | 3 | 2 | 0.054 | 8 | 12 | -0.143 | 8 | 8 | 0.015 | |
| Other urologic reason | 9 | 14 | -0.133 | 8 | 7 | 0.041 | 21 | 21 | -0.008 | 21 | 22 | -0.035 | |
| Laboratory Tests at time of Home HD initiation/time of KTx | | | | | | 1 1 | | | | | | | |
| Serum albumin | 4.0 ± | 3.4 ± | 1.082 | 3.9± | 3.9± | 0.016 | 3.9± | 3.5 ± | 0.659 | 3.8 ± 0.5 | 3.8 ± 0.6 | -0.011 | |
| (g/dL) | 0.5 | 0.6 | | 0.5 | 0.5 | | 0.5 | 0.6 | | | | | |
| Blood hemoglobin (g/dL) | 10.9± 1.3 | 9.9 ± 1.8 | 0.670 | 10.7 ±1.4 | 10.7 ± 1.6 | -0.010 | 11.1 ± 1.3 | 10.4 ± 1.7 | 0.467 | 11.0 ±1.3 | 11.0 ± 1.7 | 0.039 | |
| Other | | | | | | | | | | | | | |
| Total ESRD time before modality initiation (days) | 485 ± 423 | 1489 ± 1171 | -1.141 | 505 ± 449 | 509 ± 459 | -0.010 | 350± 342 | 829 ± 951 | -0.671 | 362 ± 357 | 379 ± 347 | -0.048 | |
| Body Mass Index (kg/m ²) | 30 ± 7 | 29 ± 7 | 0.131 | 29 ± 7 | 29 ± 6 | -0.034 | 30±7 | 28 ± 6 | 0.205 | 29 ± 7 | 29 ± 6 | 0.009 | |

Molnar MZ et al., under review



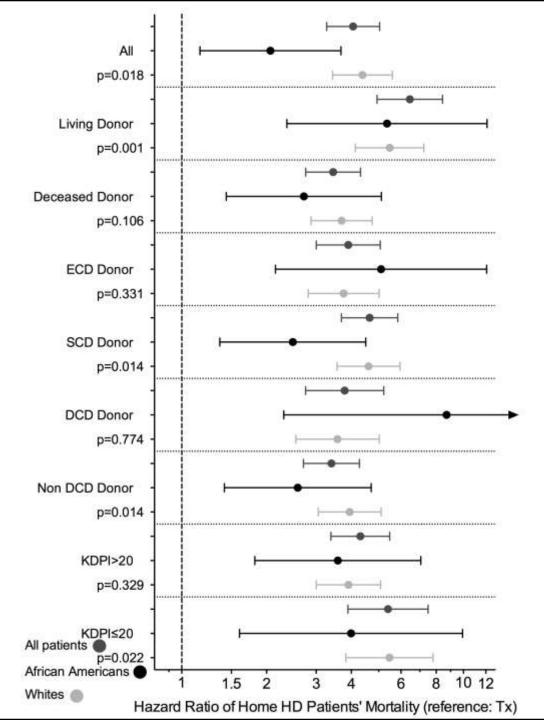
Association between renal replacement type (home hemodialysis (Home HD) versus kidney transplantation (Kidney Tx)) and mortality using Kaplan-Meier curves in propensity score matched cohorts in

All patients (Panel A), African Americans (Panel B) and Whites (Panel C)

Molnar MZ et al., under review

Mortality risk of home hemodialysis patients compared to kidney transplant recipients using propensity score matched cohorts in the first year and thereafter

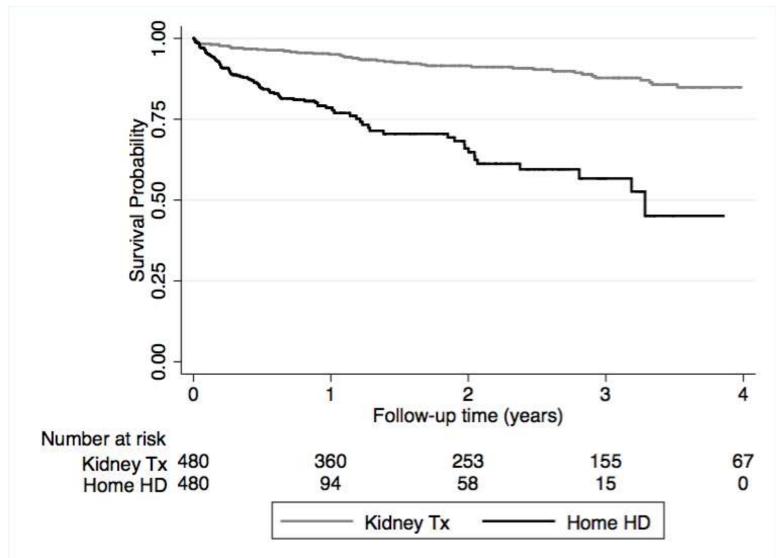
| | | Entire fol | low-up period | | 0-365 days | | | >365 days | | |
|--------|------------------|------------------------------|---------------|-----------------|------------------------|------|-----------------|------------------------|------|-----------------|
| | | Number of Patients/Events | HR | 95% CI of HR | Number of Events | HR | 95% CI of HR | Number of Events | HR | 95% CI of HR |
| All | All patients | 4,000/411 | 4.06 | 3.27-5.04 | 264 | 3.77 | 2.86-4.97 | 147 | 4.53 | 3.23-6.34 |
| donors | African American | 728/55 | 2.06 | 1.16-3.67 | 29 | 1.62 | 0.77-3.39 | 26 | 2.84 | 1.23-6.55 |
| | White | 2,894/332 | 4.38 | 3.43-5.59 | 224 | 4.21 | 3.10-5.73 | 108 | 4.66 | 3.14-6.92 |



Mortality risk of home hemodialysis patients compared to kidney transplant recipients in group of patients with different donor characteristics using propensity score matched cohorts

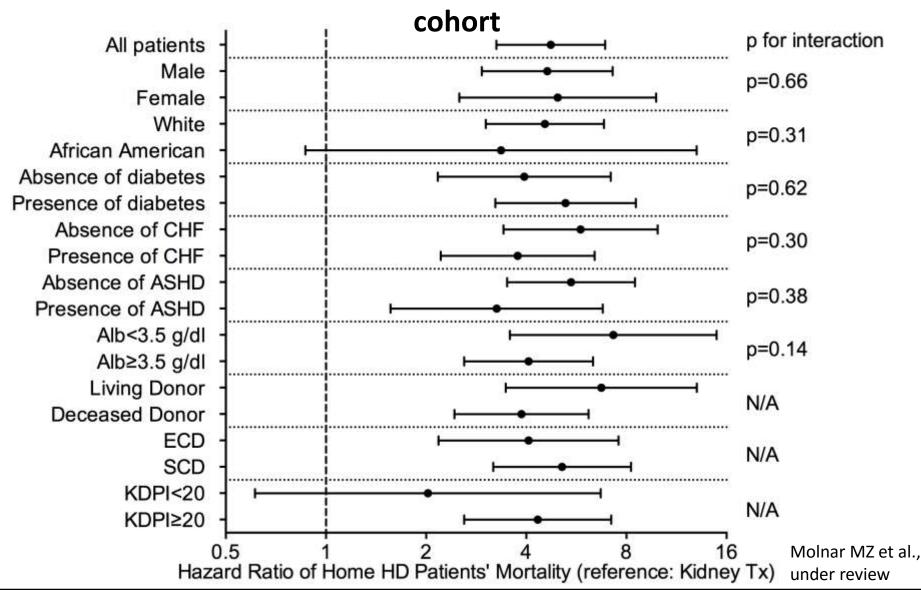
Molnar MZ et al., under review

Association between renal replacement type (home hemodialysis (Home HD) versus kidney transplantation (Kidney Tx)) and mortality using Kaplan-Meiers curves in elderly patients



Molnar MZ et al., under review

Mortality risk of home hemodialysis elderly patients compared to elderly kidney transplant recipients in groups of patients with different recipient and donor characteristics using the propensity score matched



Objectives

| 1 | Select Modality for your Tx Candidate |
|---|--------------------------------------------------------------------------------|
| 2 | Home/Extended HD versus conventional HD |
| 3 | Home HD versus Kidney Transplantation |
| 4 | Unpublished Results for Comparison of Home HD versus Kidney Transplantation |
| 5 | Conclusions |

Conclusions

- Previous studies showed that home/extended hemodialysis provides better survival than in-center HD.
- Canadian patients who received KTx had significantly better survival regardless of kidney donor type compared to home HD patients.
- Canadian patients receiving KTx reported higher hospitalization rate and duration compared to patients on intensive home hemodialysis in the first year. This disappears after the first year.
- US patients who received KTx had significantly better survival regardless of kidney donor type compared to home HD patients.
- African American home HD patients had similar first year survival to African American KTx patients without a living donor in US.



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Questions?