

Comparison of Mortality of Incident Peritoneal Dialysis and Hemodialysis Patients by Age and Diabetes in a National Cohort

Rulin Cai Hechter, MD, PhD¹; Kamyar Kalantar-Zadeh, MD, MPH, PhD¹; Csaba P Kovcsdy, MD²; Jennie Jing, MS¹; Allen R Nissenson, MD, FASN³; Rajnish Mehrotra, MD¹
 (1) Harold Simmons Center for Chronic Disease Research & Epidemiology, LABioMed at Harbor-UCLA, Torrance, CA; (2) Salem VA, Salem, VA; and (3) DaVita Inc., Denver, CO

INTRODUCTION

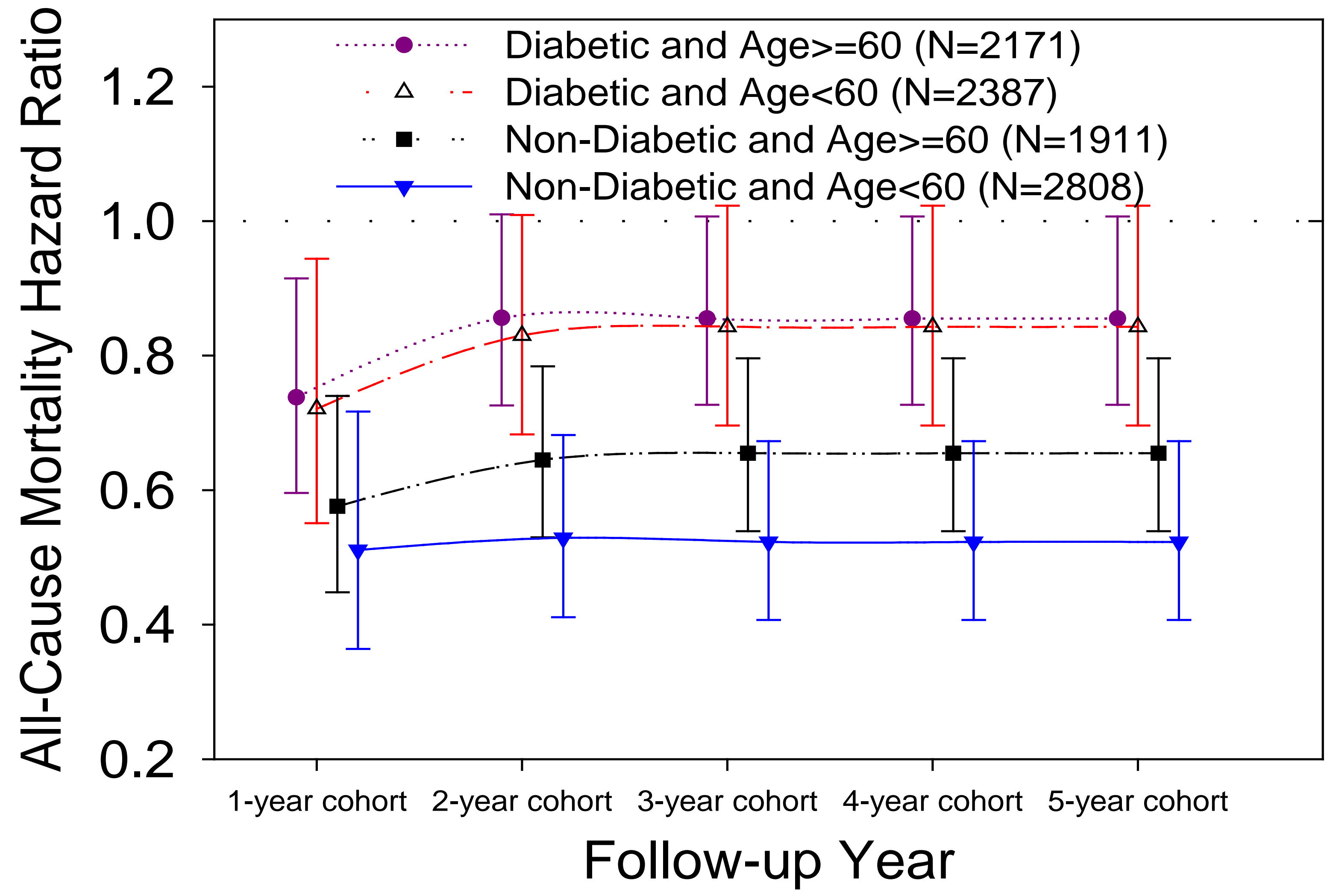
Comparing patient (pt) survival between HD and PD may relate to four statistical interactions including dialysis vintage, age, diabetic status, and co-morbid conditions. We examined a large national cohort that enables these subgroup analyses.

METHODOLOGY

- We compared the death risk of PD vs. HD in DaVita pts over 5 yrs (7/2001-6/2006) after 1:1 matching via "propensity score," created using logistic regression that included age, gender, race, diabetes, dialysis vintage, calendar quarter, and location (State) to predict the probability that a pt would be assigned to PD vs. HD. We then separately examined survival of pts who were on PD or HD for 3 to 24 mo (n=9,277) by age (≥ 60 vs. < 60 yrs old) and diabetic status.

RESULTS

- Cox models, adjusted for case-mix and laboratory measures of "malnutrition-inflammation-cachexia syndrome" (MICS) showed that PD pts had consistent survival superiority compared to HD in all subgroups, although the said survival advantage was somewhat mitigated among the diabetic PD pts (see Figure).



CONCLUSIONS

- Compared to incident HD pts, incident PD pts, especially those who were non-diabetic, show a robust and consistent survival advantage up to 5 yrs. Additional studies to identify subgroups that benefit the most from modality selection are indicated.

KEY LEARNINGS

- ✓ Among incident dialysis patients, non-diabetic PD patients appear to have a consistent survival benefits compared to HD patients.
- ✓ In diabetic patients, the survival advantage of PD is most prominent during the first year of dialysis treatment initiation.

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*Correspondence: kamkal@ucla.edu