

# UC Irvine

## UC Irvine Previously Published Works

### Title

ESTIMATED GLOMERULAR FILTRATION RATE AT RE-INITIATION OF DIALYSIS AND MORTALITY IN FAILED KIDNEY TRANSPLANT RECIPIENTS

### Permalink

<https://escholarship.org/uc/item/05r7t6h2>

### Journal

AMERICAN JOURNAL OF KIDNEY DISEASES, 59(4)

### ISSN

0272-6386

### Authors

Molnar, Miklos Z  
Streja, Elani  
Kovesdy, Csaba P  
[et al.](#)

### Publication Date

2012

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

172

**ESTIMATED GLOMERULAR FILTRATION RATE AT RE-INITIATION OF DIALYSIS AND MORTALITY IN FAILED KIDNEY TRANSPLANT RECIPIENTS**

Miklos Z Molnar, Elani Streja, Csaba P Kovesdy, Junichi Hoshino, Richard Glassock, Akinlolu Ojo and Kamyar Kalantar-Zadeh  
*Harold Simmons Center, Harbor-UCLA, Torrance, CA, Salem VAMC, Salem, VA, David Geffen School of Medicine at UCLA, Los Angeles, CA; Department of Medicine, University of Michigan*

Recent observational studies and a controlled trial suggest more favorable outcomes upon later dialysis initiation in chronic kidney disease patients. The role of estimated GFR in predicting outcome at re-initiation of dialysis in failed kidney transplant recipients is unclear. Five-year data in a large dialysis organization was linked to the national database (SRTR) to identify 747 failed kidney transplant patients with CKD Stage-5 (eGFR<15 ml/min/1.73m<sup>2</sup>), who had re-started dialysis therapy. A propensity score (PS) for early (eGFR>10.5 ml/min/1.73m<sup>2</sup>) vs. late re-initiation of dialysis was fit by logistic regression. The mortality hazard ratio (HR) was then estimated using tertiles of the fitted PS. Patients were 44±14 years old and included 42% women. Male gender (odds ratio [OR], (95%CI): 1.82(1.22-2.73)), presence of diabetes (OR:1.75(1.14-2.68)) and peripheral vascular disease (OR:3.55(1.17-10.77)) were associated with higher odds of early initiation of dialysis. Each ml/min/1.73m<sup>2</sup> higher eGFR was associated

Likelihood of dialysis re-initiation at higher eGFR (in PS tertiles)	Unadjusted model	Adjusted model	Fully Adjusted model
	HR (95% CI)	HR (95% CI)	HR (95% CI)
Lowest tertile	1.05 (0.94-1.17)	1.09 (0.98-1.22)	1.10 (0.98-1.24)
Middle tertile	1.01 (0.92-1.11)	1.02 (0.93-1.12)	1.00 (0.91-1.10)
Highest tertile	1.02 (0.95-1.09)	1.00 (0.93-1.08)	0.99 (0.92-1.07)

with 6% higher death risk in unadjusted model (HR:1.06(1.01-1.11)), and same trends were observed in fully adjusted models, which was more prominent in women and younger patients. Table shows the death HR of eGFR across lowest to highest tertiles of propensity score of early dialysis initiation, indicating a trend between higher eGFR at dialysis re-initiation and death risk in the healthiest subgroups. Hence, re-initiation of dialysis at higher eGFR levels in failed kidney transplant patients was not associated with greater survival.