UC Irvine UC Irvine Previously Published Works

Title

Time-dependent association between dialysis dose and 5-year survival in contemporary maintenance hemodialysis patients

Permalink https://escholarship.org/uc/item/5v65p65p

Journal AMERICAN JOURNAL OF KIDNEY DISEASES, 51(4)

ISSN 0272-6386

Authors

Miller, Jessica E Streja, Elani Kovesdy, Csaba <u>et al.</u>

Publication Date

2008

Copyright Information

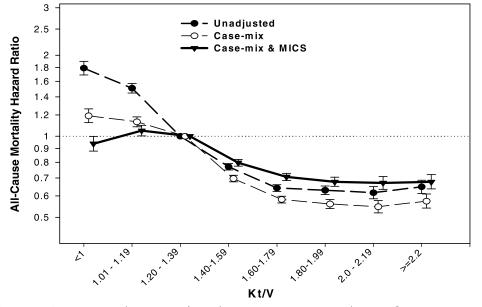
This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

168

Time-Dependent Association between Dialysis Dose and 5-year Survival in Contemporary Maintenance Hemodialysis Patients <u>Jessica E Miller</u>¹, Elani Streja¹, Csaba Kovesdy³, Charles J McAllister⁴, David Van Wyck ⁴, Joel D Kopple², and Kamyar Kalantar-Zadeh^{1,2}. ¹Harold Simmons Center for Kidney Disease Research& Epidemiology, ²Harbor-UCLA, Torrance, CA³ VA,Salem, VA⁴;DaVita, El Segundo,CA

Background: Although the HEMO Study suggested that the singlepool Kt/V of 1.32 was not inferior to 1.71, there are guidelines that have recommend maintaining Kt/V>1.4. However, specific evidence supporting the higher Kt/V threshold is lacking. <u>Methods</u>: We examined the time-dependent (calendar quarter varying) associations between achieved dialysis dose (3-mo averaged Kt/V) and 5-year survival in the national database of 110,087 MHD patients from all Legacy DaVita dialysis facilities between 7/2001 and 6/2006. Survival models were adjusted for case-mix (demographics & vintage) & malnutrition-inflammation complex syndrome (MICS) (creatinine, albumin, hemoglobin, WBC, ferritin, TIBC, lymphocyte%, calcium, phosphorus & bicarbonate). <u>Results</u>: An incremental survival improvement was noted with Kt/V level approaching the 1.6-2.2 or higher range (reference: 1.2-1.4) at all multivariate adjustment levels (Figure):



<u>Conclusions</u>: In a large national contemporary cohort of MHD pts over 5 years, achieved Kt/V > 1.4 is associated with 20-30% greater survival.