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HEMOGLOBIN A1C AND 5-YEAR SURVIVAL IN 2,798 CHRONIC PERITONEAL DIALYSIS PATIENTS WITH DIABETES MELLITUS

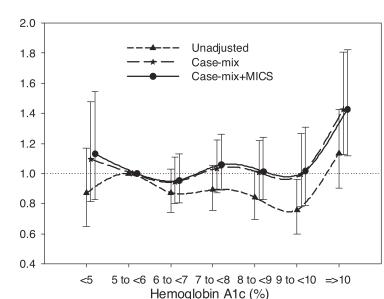
<u>Uyen Duong</u>, Rajnish Mehrotra, Csaba P Kovesdy, Jennie Jing, Mahesh Krishnan, Allen R Nissenson, Kamyar Kalantar-Zadeh. *Harold Simmons Center, Harbor-UCLA, Torrance, CA; VA Salem; DaVita, El Segundo, CA*.

<u>Background:</u> In chronic peritoneal dialysis (PD) pts, the association of hemoglobin A1c & mortality may be confounded by glucose loading in PD fluid, which may lead to worsened metabolic control in PD.

Methods: We examined a large cohort of all diabetic PD pts who underwent PD treatment for at least 45 days in any Legacy DaVita dialysis clinic over 5 yrs (7/2001-6/2006).

Results: We identified 2,798 diabetic PD pts who had A1c measures during their base calendar quarter; they were 57.4 ± 13.0 yrs old and included 44% women, 20% Blacks & 16% Hispanics. A1c was categorized into 7 groups of <5%, >=10% and 1% increments inbetween. A J-shaped trend with significant death hazard ratios (HR) was noted. Taking A1c 5-5.9% as reference, A1c>=10% had a 5-yr

death HR (and 95% confidence interval [CI]) of 1.13 (0.90-1.43), 1.43 (1.13-1.81) and 1.43 (1.12-1.82) representing the unadjusted, casemix and additional malnutrition-inflammation complex



syndrome (MICS) adjusted respectively (see figure).

Conclusions: In this large national cohort of diabetic PD patients, a hemoglobin A1c>10% appears associated with relative risk of death of 1.43 compared to those pts with a A1c of 5-6%. Clinical trials to examine the benefit of tighter glycemic control in PD ps are indicated