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

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**Background:** 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  $57.4 \pm 13.0$  yrs old and included 44% women, 20% Blacks & 16% Hispanics. A1c was categorized into 7 groups of <5%,  $\geq 10\%$  and 1% increments in-between. A J-shaped trend with significant death hazard ratios (HR) was noted. Taking A1c 5-5.9% as reference, A1c  $\geq 10\%$  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, case-mix 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

