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## **Glycemic Status and Mortality in Chronic Kidney Disease According to Transition vs. Non-Transition to Dialysis**

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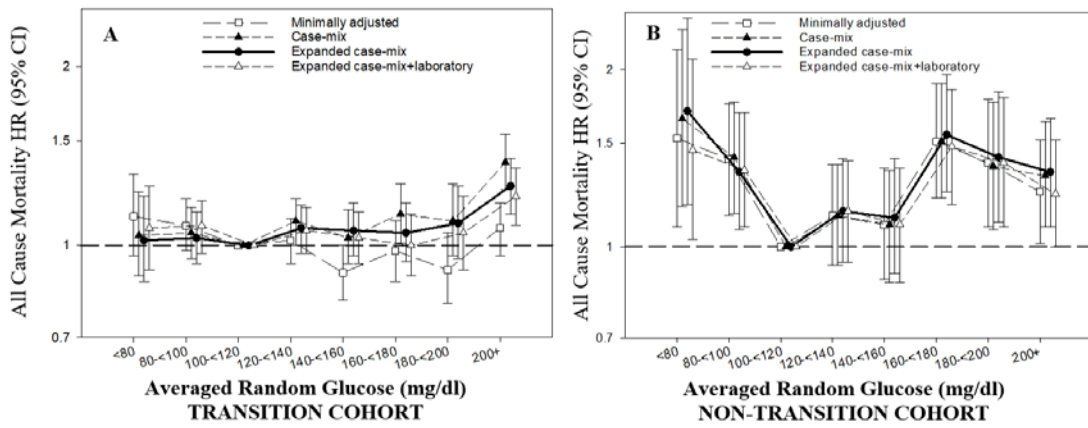
**Objectives:** The impact of glycemic control in diabetic patients with chronic kidney disease (CKD) who may or may not transition to dialysis remains uncertain, given recent interest in the conservative management of advanced CKD without dialysis therapy, which may benefit from alternative glycemic control strategies.

**Methods:** Among a national cohort of US Veterans, we examined the association of glycemic status, defined by random blood glucose and hemoglobin A1c (HbA1c), with mortality after transitioning to dialysis over 2007-2011 (Transition Cohort) compared to patients in a one-to-one matched cohort of CKD patients with diabetes who did not transition to dialysis (Non-Transition Cohort).

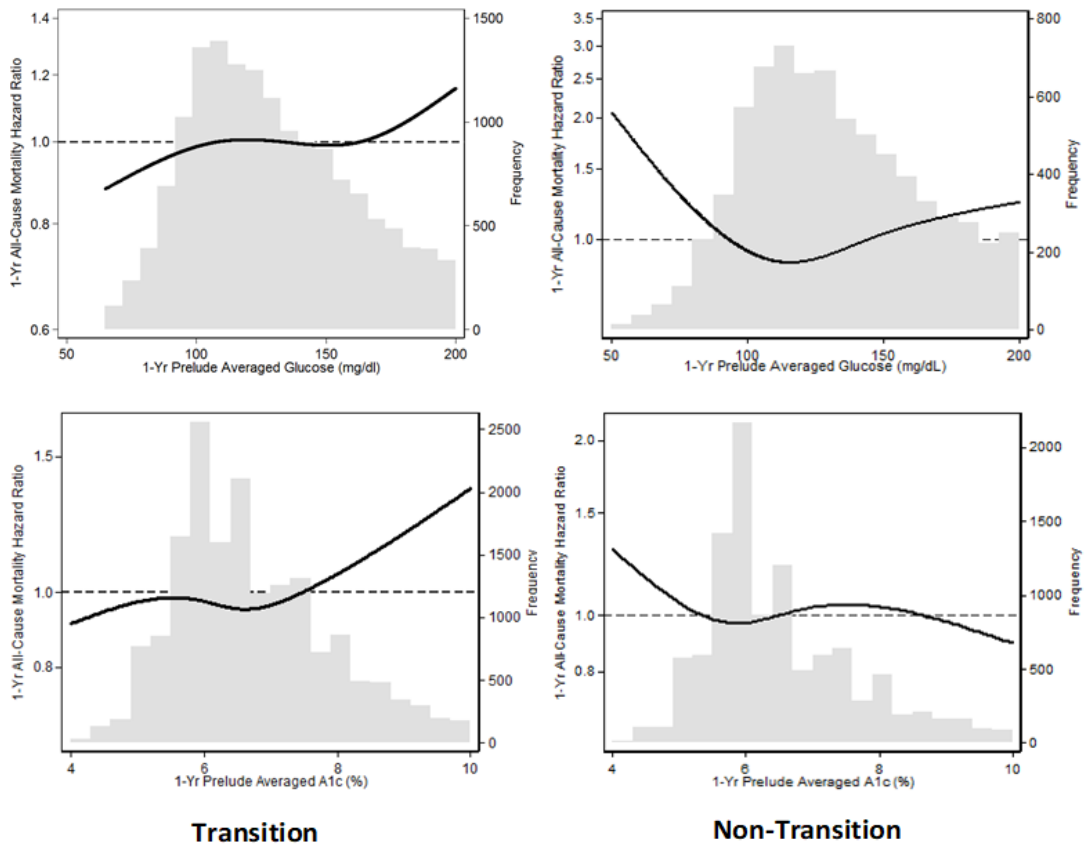
**Results:** Among 17,121 patients in the Transition Cohort, averaged random glucose  $\geq 200$ mg/dl was associated with higher mortality in expanded case-mix analyses (reference: 100- $<120$ mg/dl): adjusted HR (aHR) (95%CI) 1.26 (1.13-1.40). In the Transition Cohort, HbA1c 8- $<10\%$  and  $\geq 10\%$  were associated with higher mortality (reference: 6- $<8\%$ ): aHRs (95%CI) 1.21 (1.11-1.33) and 1.43 (1.21-1.69), respectively. Among 8711 patients in the Non-Transition Cohort, averaged random glucose  $<100$ mg/dl and  $\geq 160$ mg/dl were associated with higher death risk, while HbA1c was not associated with mortality.

**Conclusions:** In diabetic CKD patients transitioning to dialysis, higher averaged random glucose and HbA1c were associated with early dialysis mortality, whereas in matched CKD patients who did not transition, both lower and higher glucose levels were associated with higher mortality. These data suggest need for different glycemic strategies based on whether there are plans to transition to dialysis vs. pursue conservative management among diabetic patients with advanced CKD.

Averaged Random Glucose Mortality Among the Transition vs. Non-Transition Cohorts



Glycemic Status Defined by Averaged Random Glucose and Hemoglobin A1c and Mortality Among Transition vs. Non-Transition Cohorts Using Restricted Cubic Splines



**Transition**

**Non-Transition**