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OPIATE USE AND MORTALITY AMONG CHRONIC KIDNEY DISEASE PATIENTS TRANSITIONING TO

DIALYSIS: Connie Rhee¹, Elani Streja¹, Vanessa Ravel¹, Amy You¹, Yoshitsugu Obi¹, Danh Nguyen¹, Csaba Kovesdy², Kamyar Kalantar-Zadeh¹. ¹University of California Irvine, Orange, CA, USA; ²University of Tennessee Health Science Center, Memphis, TN, USA

Population based studies show that there is a disproportionately high prevalence of chronic kidney disease (CKD) patients suffering from chronic pain. While opiates are frequently prescribed as analgesics, there may be toxic accumulation of metabolites, particularly among those with advanced CKD progressing to end-stage renal disease (ESRD). We thus sought to examine how the use of opiates in the pre-dialysis (prelude) period impacts post-ESRD mortality in this population.

Among US veterans with CKD who transitioned to dialysis over 2007-14, we examined the association of pre-ESRD opiate use with post-ESRD all-cause mortality using case-mix adjusted Cox models.

Among 55,651 patients with CKD transitioning to dialysis, pre-ESRD opiate use in the 6-month prelude period was associated with higher post-ESRD mortality risk in case-mix analyses (ref: no opiate use): HR (95%CI) 1.05 (1.01-1.10). Similar findings were observed for 1-year and 2-year prelude periods. In sensitivity analyses, increasing frequency of opiate prescription exceeding 4 prescriptions in the 6-month prelude period was associated with higher mortality risk in case-mix analyses (ref: no prescription): HRs (95%CI) 0.94 (0.88-0.99), 1.01 (0.93-1.10), 1.03 (0.92-1.15), 1.31 (1.16-1.48), 1.23 (1.15-1.32) for 1, 2, 3, 4, and ≥ 5 prescriptions, respectively.

In CKD patients transitioning to dialysis, more frequent pre-ESRD opiate use was associated with higher post-ESRD mortality. Further studies are needed to identify non-opiate based analgesic options in this population.