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ASSOCIATION OF THE NOVEL CACHEXIA MARKER "GROWTH DIFFERENTIATION FACTOR 15" (GDF15) WITH MORTALITY IN A PROSPECTIVE HEMODIALYSIS COHORT

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Cachexia and protein-energy wasting are potent predictors of higher mortality risk in dialysis-dependent chronic kidney disease (CKD) patients. The novel cachexia marker, GDF15, is a protein associated with inflammation, cardiovascular disease, and decreased survival in patients with underlying malignancy. However, the impact of GDF15 on the survival of CKD patients is unknown. Among 203 prevalent hemodialysis patients enrolled in the prospective MADRAD study over the period of 10/2011-8/2014, we examined the association of GDF15 levels with all-cause mortality risk. Associations between GDF15 categorized into tertiles with mortality were estimated using unadjusted and case-mix adjusted Cox models. Compared with the lowest GDF15 tertile, the highest GDF15 tertile was associated with higher mortality risk in unadjusted and case-mix adjusted models: HR (95%CI) 3.19 (1.35-7.55) and 2.45 (1.00-6.00), respectively, p-for-trend 0.03 (Figure 1A). Higher circulating GDF15 levels in hemodialysis patients are associated with higher all-cause mortality. Future studies are needed to determine whether modulation of GDF15 levels and subsequent correction of cachexia improves survival in this population.