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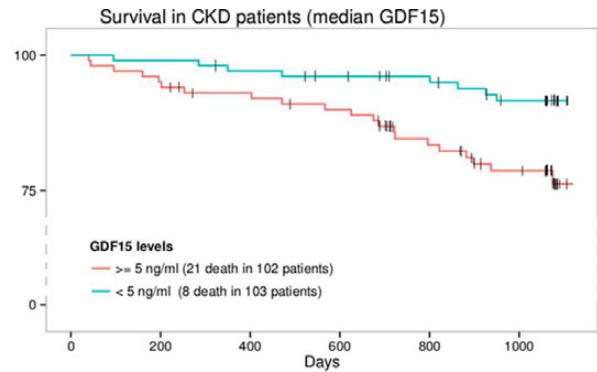
ASSOCIATION OF THE NOVEL CACHEXIA MARKER “GROWTH DIFFERENTIATION FACTOR 15” (GDF15) WITH MORTALITY IN HEMODIALYSIS PATIENTS

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Introduction and Aims: Cachexia and muscle wasting are associated with poor outcomes including decreased survival in dialysis dependent CKD patients. The novel cachexia marker GDF15 is a protein associated with inflammation, cardiovascular disease and higher mortality in several cancer types but its role in CKD is not known. **Methods:** We examined the association of GDF15 and all-cause mortality in a cohort of 205 hemodialysis patients enrolled in the Malnutrition, Diet and Racial Disparities in Chronic Kidney Disease (MADRAD) study with follow-up for up to 3 years (2011–2014).

Results: Patients were 53±15 years old and included 40% women, 34% blacks and 57%

diabetics. The average (±SD) GDF15 plasma level was 6.0 (±4.0) ng/ml and median was 5.0 ng/ml. There were 21 vs. 8 deaths in patients with GDF15 above vs. below median. Univariate and multivariate (adjusted by age gender and ethnicity) showed a death HR of low vs. high GDF15 of 0.34 (p=0.006) and 0.40 (p=0.038), respectively. Kaplan-Meier survival data are shown:



Conclusions: Hence, higher serum GDF15 levels are associated with substantially higher mortality in hemodialysis patients. Whether modulating GDF15 pathways to correct cachexia improves survival warrants clinical trials.