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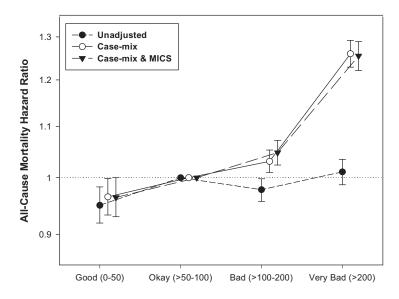
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COMPOSITE DIETARY PROTEIN AND PHOSPHATEMIA SCORE TO COMBINE COMPETING RISKS IN CKD

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Higher serum phosphorus (P), a mortality predictor in hemodialysis (HD) patients (pts), can be lowered by restricting dietary protein intake (estimated by normalized protein catabolic rate, nPCR), but the latter measure is associated with increased mortality. We hypothesized that combining these 2 competing risks in form of a new score can serve as a more commensurate risk predictor. In 104,628 HD patients, who were followed for up to 6 yrs, we combined the amount of nPCR below 1.5 g/kg/day (1.5-nPCR) and serum P above 3.0 mg/dL (P-3), and created the new metric: (1.5-nPCR)*(Phos-3))*100. Among HD pts with nPCR <1.4 g/kg/day and P>3.5 mg/dL, four *a priori* groups based on the score were compared: 0-<50 "Target" (n=8,311), 50-<100 "Fair" (n=26,347), 100-<200 "Poor" (n=46,200), and >=200 "High-Risk" (n=23,770). Survival models were adjusted for case-mix and surrogates of malnutrition-inflammation complex syndrome (MICS) (see Figure).



In HD patients a score that combines serum P and nPCR is an incremental predictor of death risk. Controlling P while maintaining adequate protein intake to improve survival warrants controlled trials.