Title
Serum Intact PTH of 100 to 150 pg/ml Is Associated with Greatest Survival in Maintenance Hemodialysis Patients.

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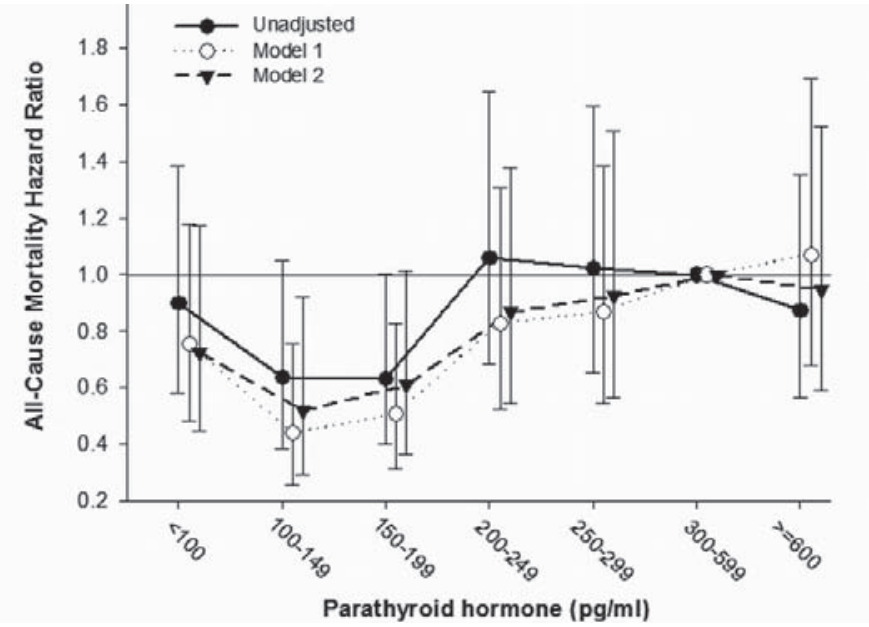
Serum Intact PTH of 100 to 150 pg/ml Is Associated with Greatest Survival in Maintenance Hemodialysis Patients. M. Rambod*[1], S. Sprague[2], K. Kalantar-Zadeh*[1]. [1]Nehprology and Hypertension, Los Angeles BioMedical Research Institute, Torrance, CA, USA, [2]Nehprology and Hypertension, Northwestern University Feinberg School of Medicine, Chicago, IL, USA.

Background: The Kidney Disease Outcome Quality Initiative (KDOQI) guidelines recommended intact (i) PTH of 150 to 300 pg/ml as the target range for maintenance hemodialysis (MHD) patients (pts) is higher than the normal iPTH (<65 pg/ml). We hypothesized that lower than the KDOQI recommended iPTH range is associated with greatest survival in MHD pts. Methods: We examined the 5-yr (10/01-1/07) mortality-predictability of iPTH in 748 MHD pts after multivariate adjustment for case-mix (Model 1) and also for serum albumin, phosphorus and inlereukin-6 levels (Model 2). Results: Pts, 54±15 yrs old, including 45% women, 32% Blacks and 55% diabetics, with median dialysis vintage of 20 months, had a median iPTH of 247 pg/ml (inter-quartile range: 159-408 pg/ml). During the 5-yr follow-up, 228 pts died. Cox proportional regression calculated hazard ratio (HR) and 95% confidence intervals for all-cause mortality across increments of serum PTH were lowest for iPTH between 100 and 150 pg/ml (Table & Figure).

	Death Hazard Ratio (Ref: iPTH 300-600 pg/ml)			
Death hazard ratio (95% CI)	**<100** pg/ml	**100-149** pg/ml	**150-199** pg/ml	**200-249** pg/ml
Model 1	**0.75** (0.48-1.18)	**0.44** (0.26-0.75)	**0.51** (0.31-0.83)	**0.83** (0.53-1.31)
Model 2	**0.72** (0.45-1.17)	**0.52** (0.29-0.92)	**0.61** (0.37-1.01)	**0.87** (0.55-1.38)



Conclusion: Serum PTH level below the KDOQI range appears associated with the greatest survival in MHD patients even after controlling for case-mix, nutritional status and inflammation.

***Disclosures:* M. Rambod**, *None.*
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