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COMPARING DEATH RISK OF POLYCYSTIC KIDNEY DISEASE (PKD) HEMODIALYSIS (HD) PATIENTS TO NON-PKD HD PATIENTS

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Although mortality among PKD patients (pts) with ESRD is thought to be lower than that of non-PKD ESRD pts, the source of the survival advantage is not known. To test the hypothesis that superior survival of PKD HD pts arises from lower disease burden, we examined 3-yr (7/2001-6/2004) survival of 61,022 HD pts in all DaVita dialysis clinics & compared 1,596 PKD to non-PKD pts using baseline & time-dependent Cox models, adjusted for case-mix & malnutrition-inflammation-cachexia syndrome (MICS). We also “matched” PKD to non-PKD by sex, age (+/-5 yrs), diabetes (DM), vintage & state. **Table** shows 3-yr death hazard ratios [in bold] (and 95% confidence levels):

Comparing to	Cox	Unadjusted	Case-mix	MICS
All pts	Baseline	0.62 (0.56-0.68)	0.77 (0.70-0.85)	0.80 (0.73-0.89)
All pts	Time dependent	0.61 (0.56-0.68)	0.74 (0.67-0.81)	0.86 (0.78-0.95)
All pts (matched)	Baseline	0.71 (0.62-0.71)	0.72 (0.62-0.84)	0.82 (0.68-0.98)
All pts (matched)	Time dependent	0.71 (0.62-0.71)	0.71 (0.61-0.83)	0.72 (0.59-0.87)
Non-DM pts (matched)	Baseline	0.83 (0.72-0.95)	0.83 (0.71-0.97)	0.91* (0.76-1.09)
Non-DM pts (matched)	Time dependent	0.82 (0.72-0.95)	0.82 (0.70-0.96)	0.90* (0.74-1.09)

Case-mix models showed 23% to 29% lower mortality in PKD pts compared to other HD pts, & 17% to 18% compared to non-DM non-PKD pts. Control for MICS mitigated the survival benefit, indicating that a main contributor to better survival of PKD pts is a more favorable nutritional or inflammatory status of these pts.

