

Studies on Survival Benefits of VDRA Compounds in CKD Patients

Study	Population (N)	Design	Results	Impact
Kalantar-Zadeh ASN 2006; SA-PO340	Cohort 1: CKD No-Dx SHPT No D 65,352 Cohort 2: CKD Dx SHPT No D 667 Cohort 3: CKD w/D 625	Retrospective cohort study – claims database	Significantly higher risk of mortality in cohort of CKD w/SHPT with no vitamin D	1 st study to demonstrate a higher risk of progression to dialysis or death without treatment with VDRA therapy.
Teng et al <i>N Engl J Med</i> 2003	HD IV P (29,021) vs IV C (38,378)	Historical cohort	16% lower all-cause mortality with paricalcitol	1 st study to show that paricalcitol had a significant survival advantage over calcitriol.
Shoji et al <i>Nephrol Dial Transplant</i> 2004	HD αC (162) vs no αC (80)	Historical cohort	Lower cardiovascular mortality with alfacalcidol treatment	1 st study to demonstrate a higher risk or cardiovascular death without treatment with VDRA therapy [Japanese population].
Teng et al <i>JASN</i> 2005	HD IV vit D (37,173) no vit D (13,864)	Historical cohort	20% lower all-cause mortality in the vitamin D group	1 st study to demonstrate a higher risk of death without treatment of VDRA.
Young et al ASN 2005; TH-PO735	HD (29,696) oral vit D, IV C, IV P, and any vit D vs no vit D	Prospective, cross- sectional	9% lower mortality w vit D (all) vs. no vit D 15% lower mortality w IV paricalcitol vs. no vit D	2 nd study to demonstrate a higher risk of death without treatment with VDRA therapy.
Kalantar-Zadeh et al <i>Kidney Int</i> 2006	Incident/ prevalent HD (58,058) P vs no P	Prospective	Lower all-cause mortality associated with paricalcitol use in time-dependent models	5 th study to demonstrate a higher risk of death without treatment with VDRA therapy.
Melamed et al <i>Kidney Int</i> 2006	HD (746) PD (259) IV C vs no C	Prospective, longitudinal	Lower all-cause mortality associated with calcitriol use	3 rd study to demonstrate a higher risk of death without treatment with VDRA therapy.
Tentori et al <i>Kidney Int</i> 2006	Incident HD IV C (3212) IV P (2087) IV D (2432)	Historical cohort	Lower all-cause mortality with activated vitamin D No difference in all-cause mortality between doxercalciferol and paricalcitol	4 th study to demonstrate a higher risk of death without treatment with VDRA therapy. 2 nd study to show that paricalcitol had a significant survival advantage over calcitriol.
Naves et al ASN 2006; TH-PO977	HD (16,004)	Historical cohort	42% lower mortality with oral active vit D vs no vit D	6 th study to demonstrate a higher risk of death without treatment with VDRA therapy [Latin American population]
Wolf et al <i>Kidney Int</i> 2007	1000 nested HD	Prospective cohort	Lower all-cause mortality in the vitamin D group	1 st study to demonstrate vitamin D deficiency was associated with an increased risk of death especially among the patients without VDRA treatment.
Shoben et al <i>JASN</i> 2008	CKD Stage 3 & 4 (1418) Oral C vs no C	Matched cohort	Lower mortality with oral calcitriol use vs no D in predialysis patients with CKD	2 nd study to demonstrate a higher risk of death without treatment with VDRA therapy in predialysis patients.
Kovesdy et al <i>Arch Intern Med</i> 2008	CKD Stage 3-5 predialysis (520) Oral C vs no C	Observational	Lower all-cause mortality with oral calcitriol vs no D in predialysis patients with CKD	1 st study to demonstrate a higher risk of death without treatment with VDRA therapy in predialysis patients.
Wolf et al <i>JASN</i> 2008	Incident HD (9303)	Prospective cohort	Increased use of VDRA was associated with increased survival in black dialysis patients as compared to white dialysis patients	1 st study to demonstrate a higher risk of death in black dialysis patients without treatment of VDRA as compared to white dialysis patients.