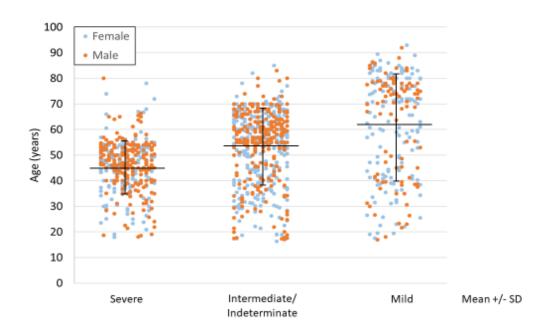


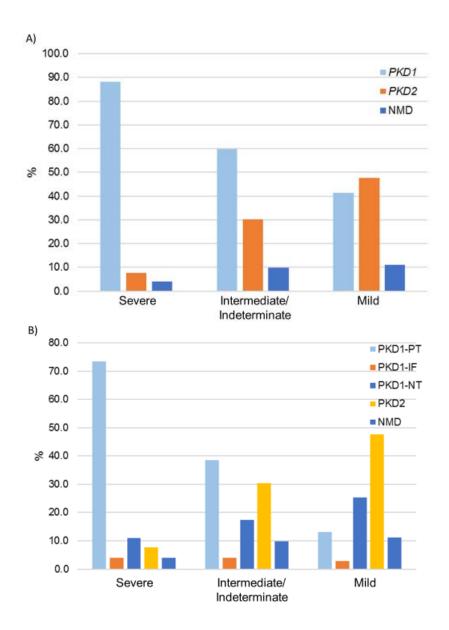
Supplementary Figure S1. Prevalence of different mutation types in eTGESP families with clinical information available for two or more affected relatives. Protein truncating, PT; Inframe Insertion/deletion, IF; Non-truncating, NT; No mutation detected (NMD).



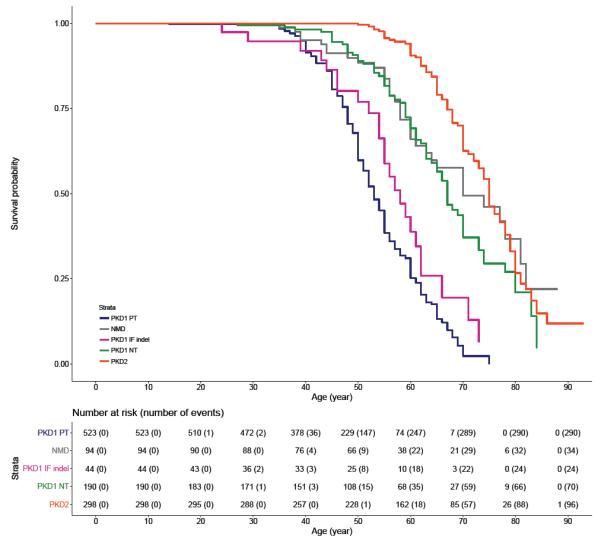
Supplementary Figure S2. Mild mutations were equally prevalent in large families. NMD, no mutation detected. Cochrane-Armitage test for trend: Z = -0.205, P = 0.84.



Supplementary Figure S3. Age of patients with severe, intermediate/indeterminate, and mild ADPKD. Error bars represent standard deviation.



Supplementary Figure S4. Protein-truncating *PKD1* mutations are more common in patients with severe **kidney disease.** (A) Genes and (B) mutation types found in ADPKD patients with evidence of severe disease, mild disease, or intermediate/indeterminate. For difference by gene: $\chi^2 = 151$; P < 0.00001; for difference by mutation type: $\chi^2 = 236$; P < 0.00001. PT, protein-truncating; IF, inframe insertion/deletion; NT, non-truncating; NMD, no mutation detected.



Supplementary Figure S5. Survival analysis by responsible ADPKD mutation type. The number of patients at risk for ESRD and the cumulative number of patients who reached ESRD (in parentheses) for each mutation type are provided at the bottom of the plot.

Supplementary Table S1. Cases with conflicting evidence for both mild and severe kidney disease

Age,		eGFR	Follow up			
gender	eGFR	decline	(years)	MCIC	Mutation	Family history
22F	93	7.8	3.4	1B	PKD1-PT	ESRD at age 54 in father
					c.6808_6811delGACA:	and paternal
					p.D2270fs	grandmother
19F	94	8.6	1.4	1A	PKD1-NT	Rapid progression with
					c.G10951A:	MCIC 1C in mother
					p.G3651S	
36F	93	7.7	3.5	1B	PKD1-PT	ESRD at age 65 in
					c.10500-1G>A:	mother
					p.L3500fs	
35F	89	7.6	3.5	1A	PKD2	ESRD at 65 in paternal
					c.602G>A:	aunt; father unknown
					p.Trp201X	
37F	90	6.0	1.7	1A	PKD1-PT	ESRD at 45 in mother
					c.6487C>T;	
					p.Arg2163X	

eGFR is in ml/min/1.73m² by CKD-EPI equation. eGFR decline is ml/min/1.73m² per year. MCIC, Mayo Clinic Imaging Classification;