

# PERITONEAL DIALYSIS (PD) CAN BE AN OPTION FOR AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE (ADPKD) : A MULTICENTRE OBSERVATIONAL STUDY

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## INTRODUCTION

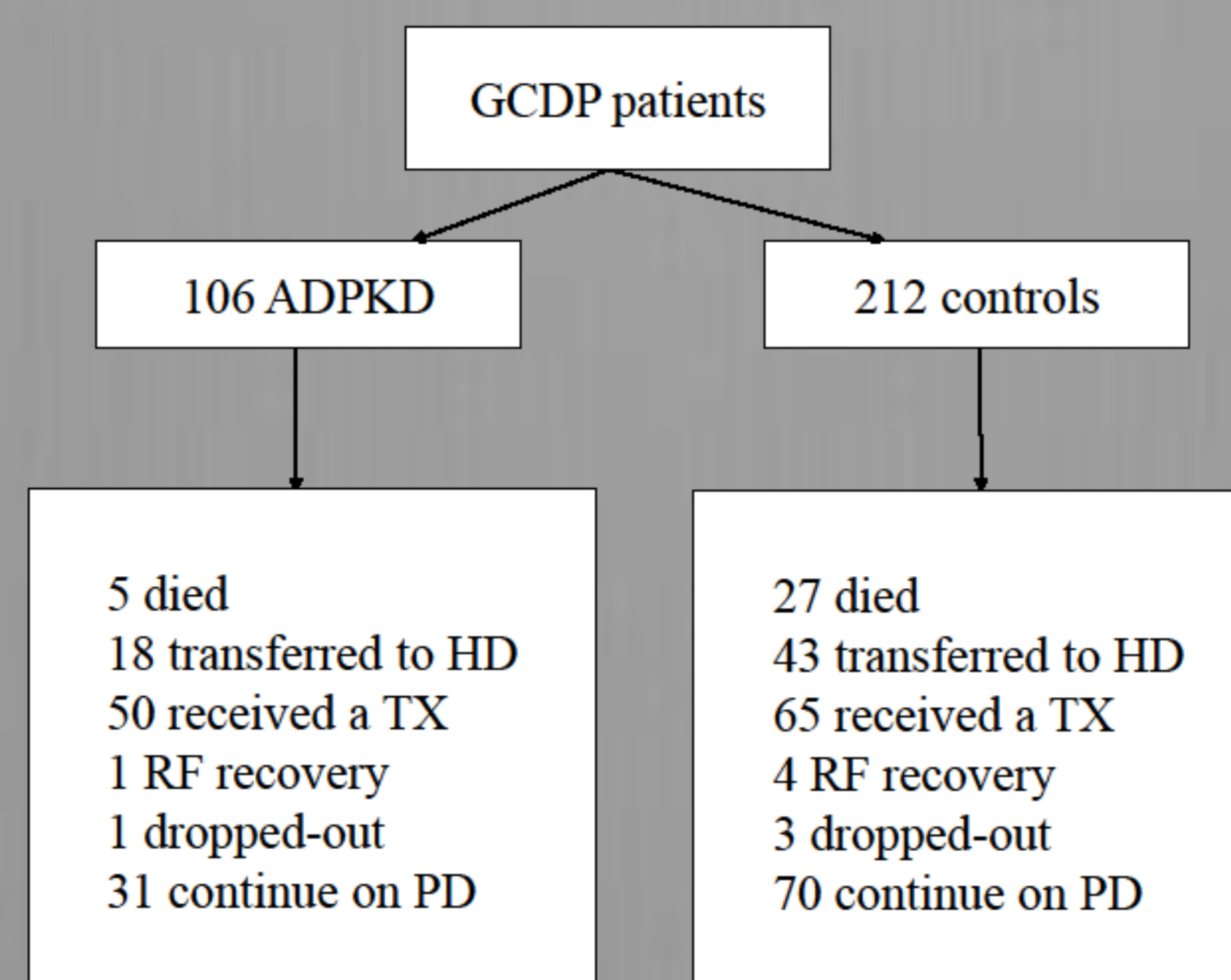
**Background:** Polycystic kidney disease (ADPKD) has been considered as a relative contraindication for peritoneal dialysis (PD), although there are not enough evidences available

**Aim:** To describe clinical outcomes of ADPKD patients and to compare it with a control group (2:1 ratio)

## METHODS

A multicenter (20 PD-Units) historical prospective matched-cohort study over all ADPKD patients starting PD (n: 106) during 8 years and a control group (n:212) with 2 consecutive patients without ADPKD. Mortality, PD-technique failure, peritonitis, abdominal wall leaks and cyst infections were compared

## RESULTS

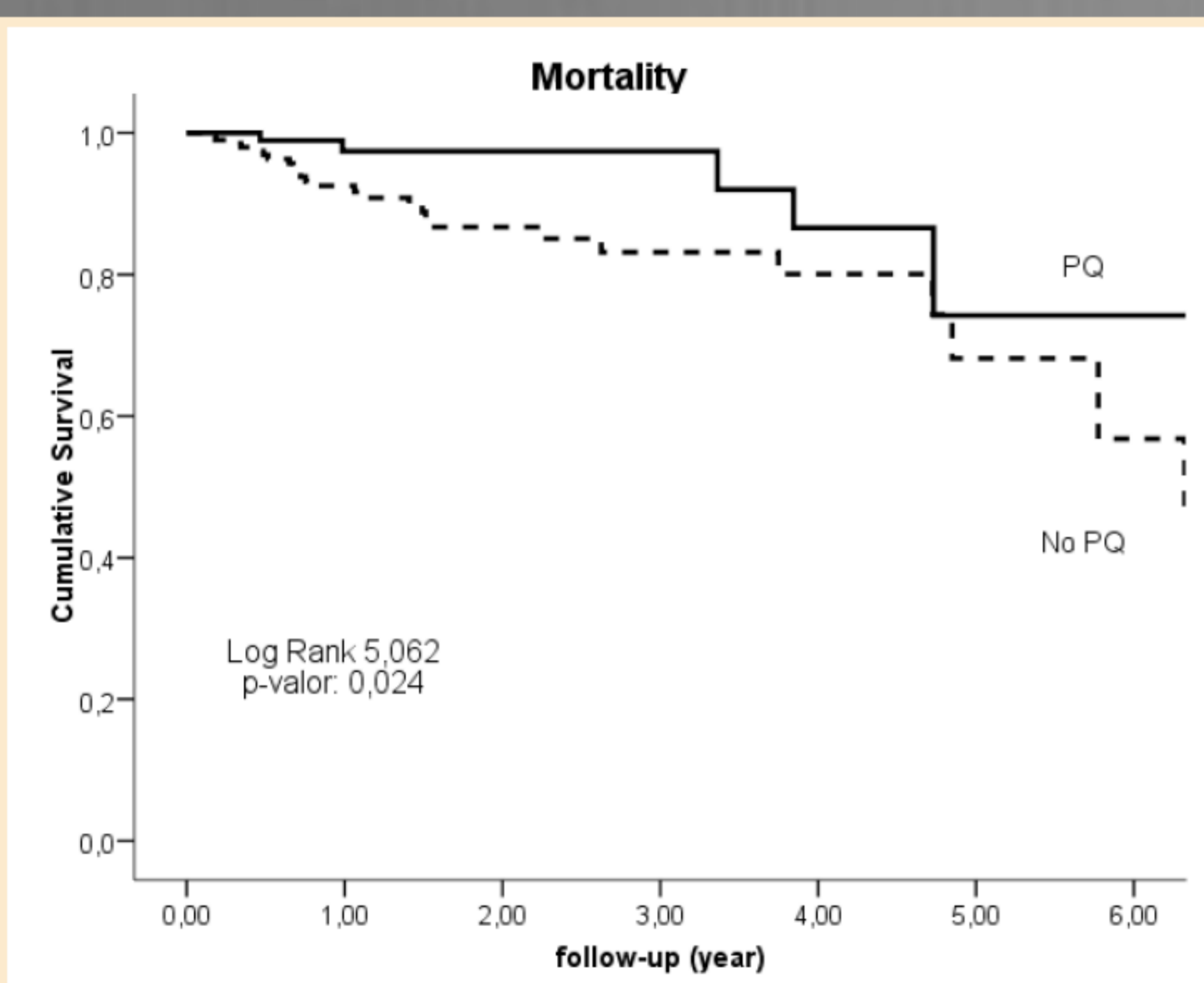
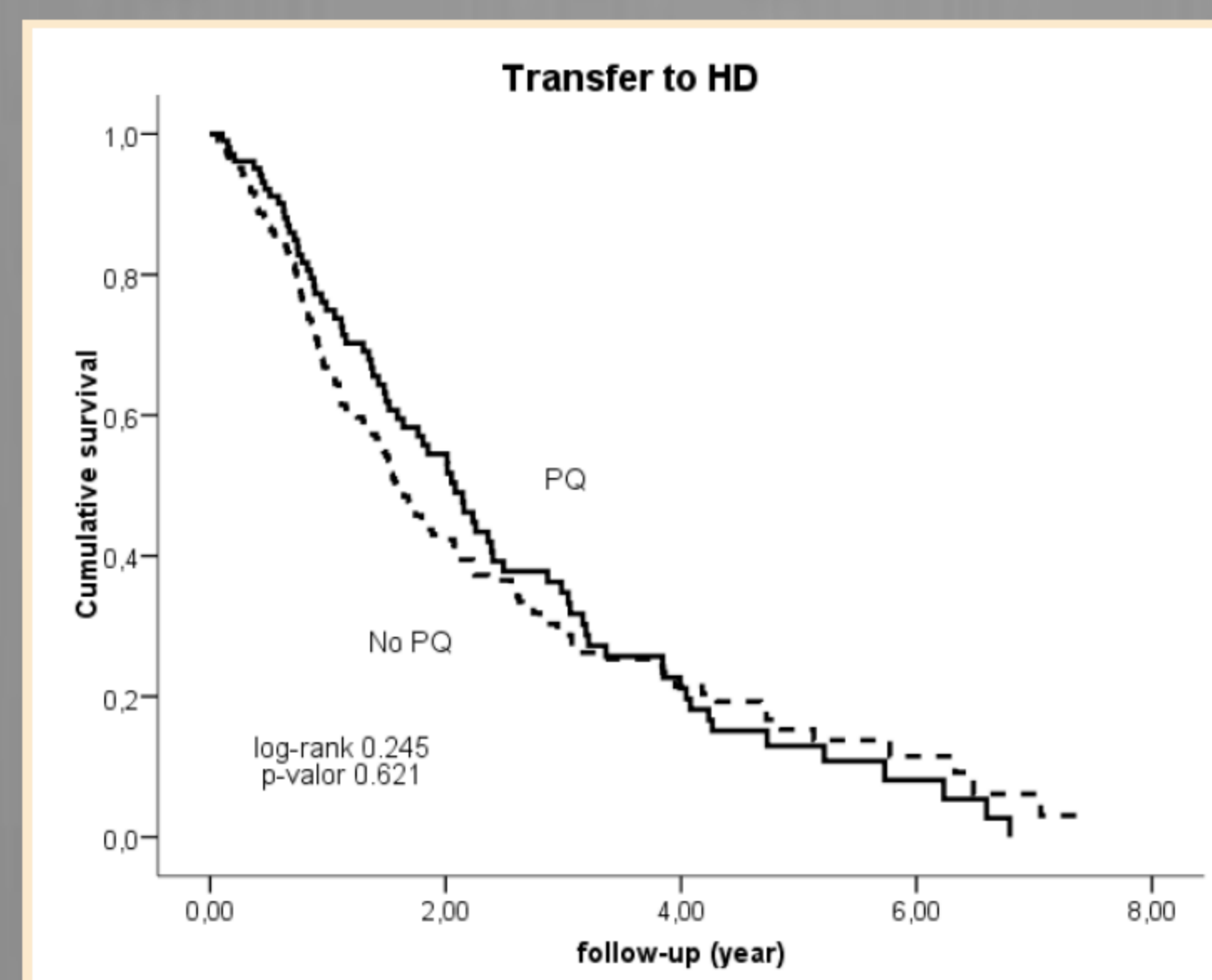
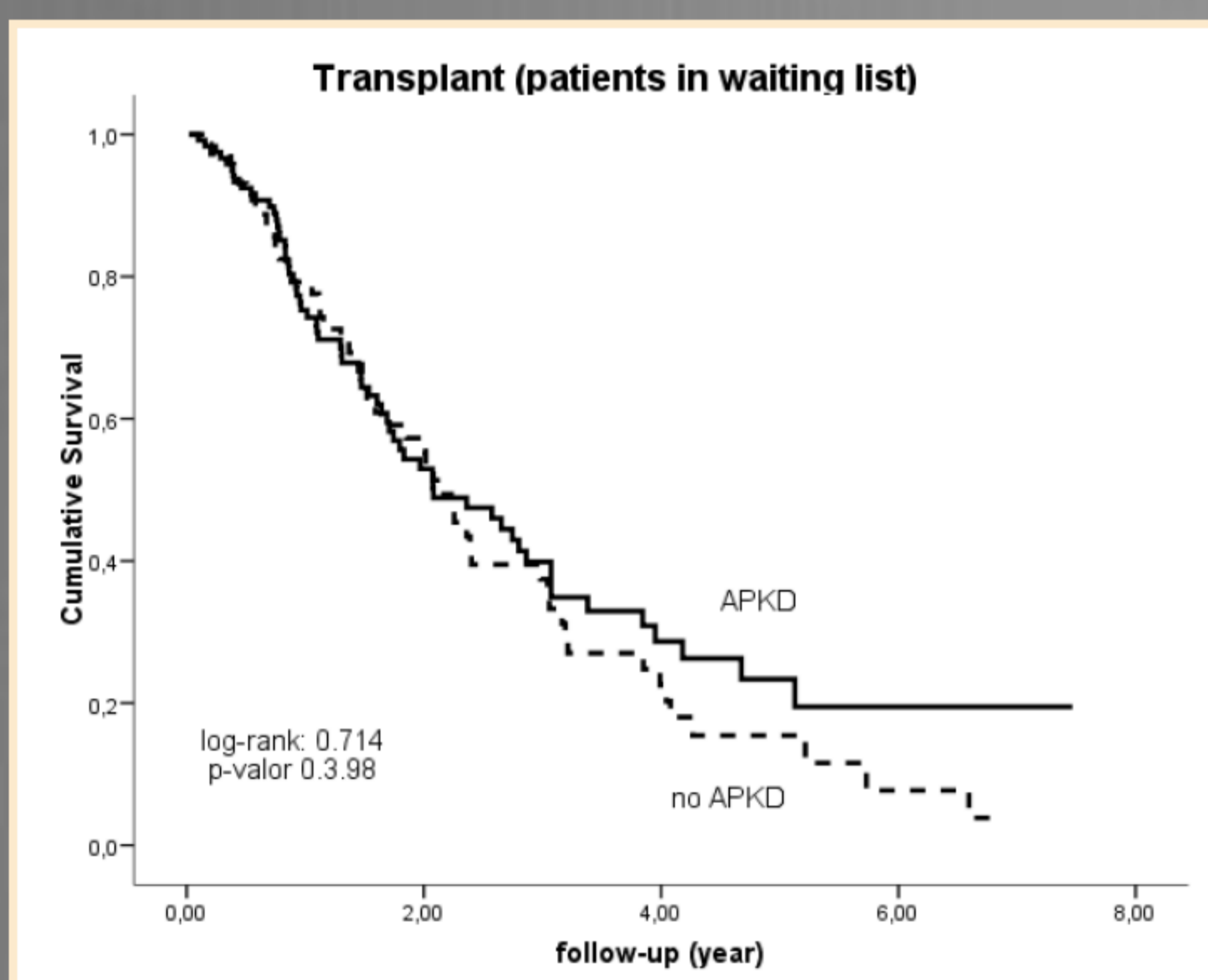


ADPKD patients had similar age (53.7 SD 15.1) but less **Charlson Index**, **DM** and **CV** events when PD started

Table I Baseline data. Data shown as mean or percentage

	Total	No ADPKD	ADPKD	p-value
N	318	212	106	
Follow-up (patient-years)	557.52	355.43	202.09	
CV <sup>1</sup> (%)	22.0	27.8	10.4	<0.001
DM <sup>2</sup> (%)	21.4	29.2	5.7	<0.001
Charlson index	4.93 (2.29)	5.27 (2.50)	4.27 (1.58)	<0.001
No patient choice of PD (%)	5.2	6.3	2.9	0.2
Prior HD (%)	16.6	21.1	7.6	0.004
Prior transplantation (%)	7.6	8.6	5.7	
No prior RRT (%)	75.8	70.3	86.7	
APD <sup>3</sup> (%)	36.8	33.7	43.4	0.1

<sup>1</sup>CV cardiovascular events, <sup>2</sup>DM, diabetes mellitus, <sup>3</sup>APD, automated peritoneal



More ADPKD patients in the **transplant waiting list** (69.8 vs 58%, p=0.04)

Similar Overall **technique survival** but More frequent **transfer to hemodialysis**

Longer median **patient survival** (6.04 [5.39-6.69] vs 5.57 [4.95-6.18] years)

Lower **mortality rate** (2.5 vs 7.6 deaths/100 patient-year, p: 0.02)

**No differences** in delivered dialysis dose, clinical events that required transient-transfer to HD, nor in peritoneal leakage episodes

The **cyst infection** rate was low (0.09 episodes per patient-year) and seems not to be associated to peritonitis episodes

**Peritonitis** rate 0.54 vs 0.56 per patient/year, (ns) and **hospital admission** rates 0.64 vs 0.72, per patient/year (ns)

Table II. Baseline clinical indicators. Data shown as mean or percentage

	Total	No ADPKD	ADPKD	P value
N	318	212	106	
BP controlled (%)	50.2	49.3	52	0.21
High SBP (%)	20.3	23	14.7	
BP uncontrolled (%)	29.6	27.8	33.3	
Hb <sup>1</sup> (g/dl)	12.18 (1.50)	11.96 (1.49)	12.63 (1.44)	0.001
Weekly Kt/Vurea basal	2.58 (0.76)	2.52 (0.80)	2.68 (0.65)	0.10
RRF <sup>2</sup> basal (ml/min)	7.4 (4.1)	7.1 (4.4)	7.9 (3.4)	0.10
Peritonitis rate (episodes/year)	0.55	0.56	0.54	0.78
Hospitalization rate per year	0.69	0.72	0.63	0.22

<sup>1</sup>Hb: hemoglobin, <sup>2</sup>RRF: residual renal function

**CONCLUSION:** ADPKD patients have similar technique failure, as well as better survival and transplantation rates

**PD is a suitable renal replacement therapy option for ADPKD patients**

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