

# Survival and dialysis prescription in very old patients on dialysis: data from Slovenian Renal Replacement Therapy Registry

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## OBJECTIVES

The age of patients reaching end-stage renal disease and requiring renal replacement therapy is increasing according to data from all major registries.

The aim of our study was to analyze renal replacement therapy and survival of incident end-stage renal disease patients in Slovenia aged  $\geq 80$  years.

## PATIENTS AND METHODS

We analyzed data from the Slovenian Renal Replacement Therapy Registry and included all incident (day 1) patients  $\geq 80$  years of age and who started RRT between Jan 1<sup>st</sup>, 2004 and Dec 31<sup>st</sup>, 2010.

Dialysis prescription and type of vascular access at the end of patients' first year on dialysis (or prior to death for patients not surviving by the end of first year) was recorded from the Registry.

Patients were followed until Dec 31<sup>st</sup>, 2010. Survival was censored in case of recovery of renal function (4 cases); none of the patients was transplanted.

Figure 1: Vascular access (at the end of first year on dialysis).

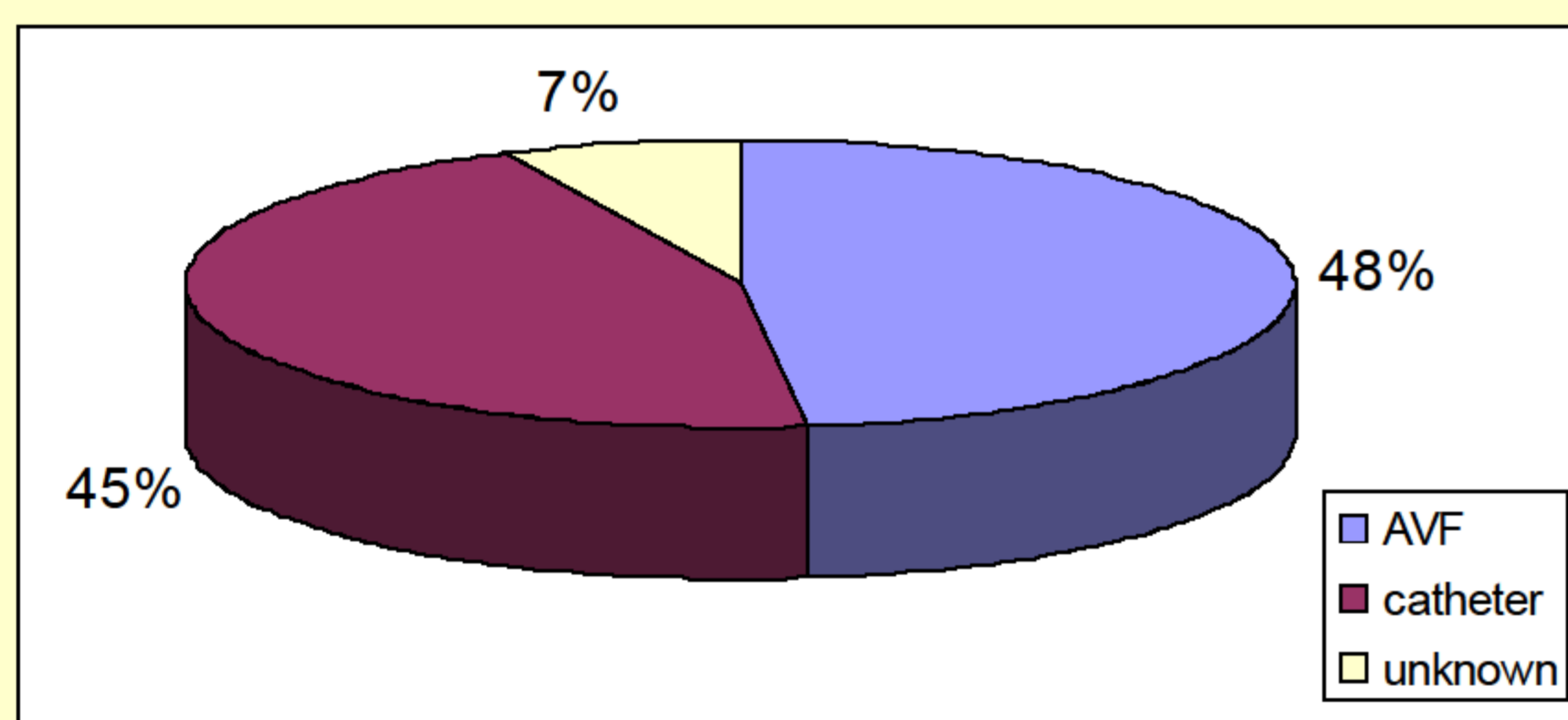


Figure 2: Kaplan-Meier survival curve.

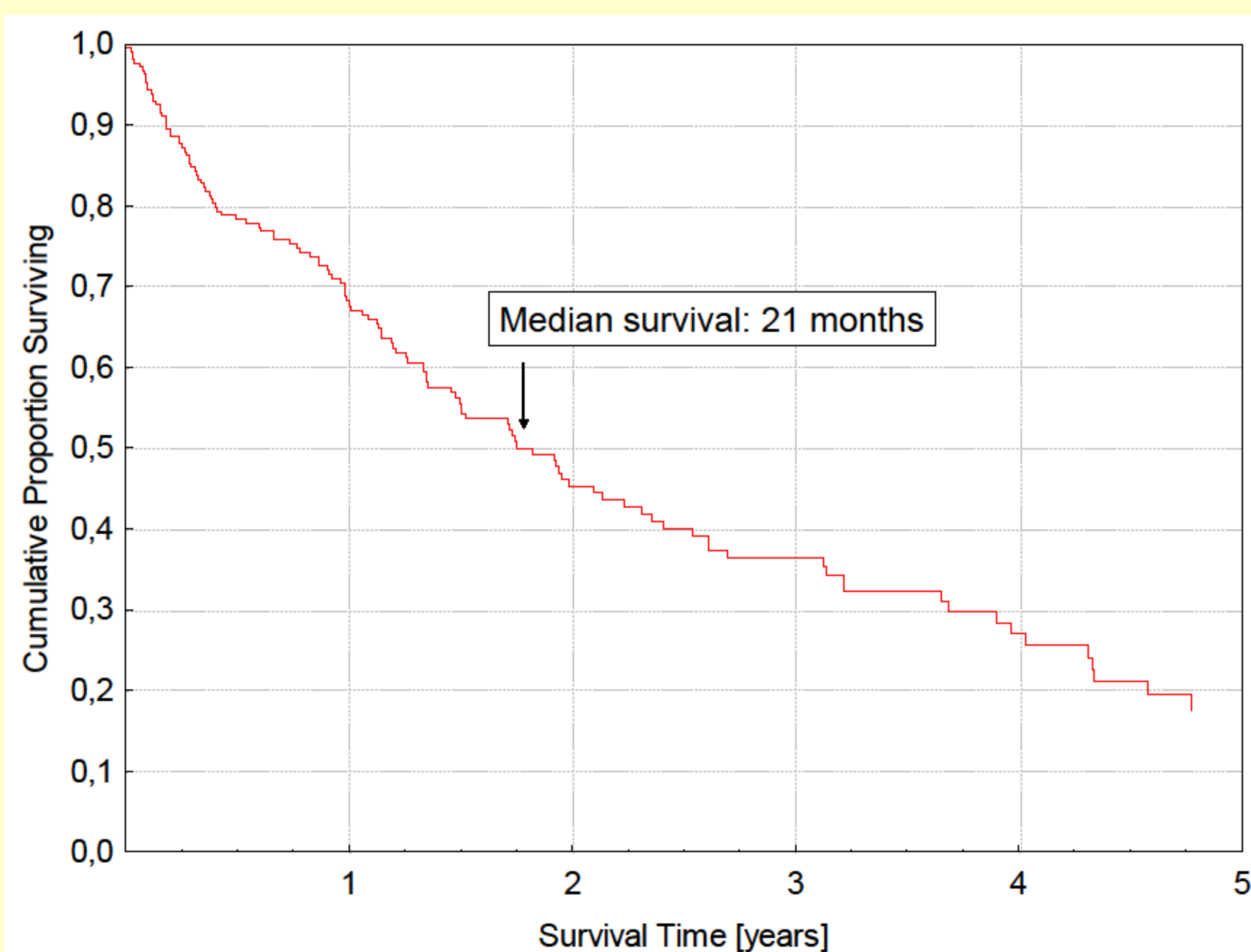
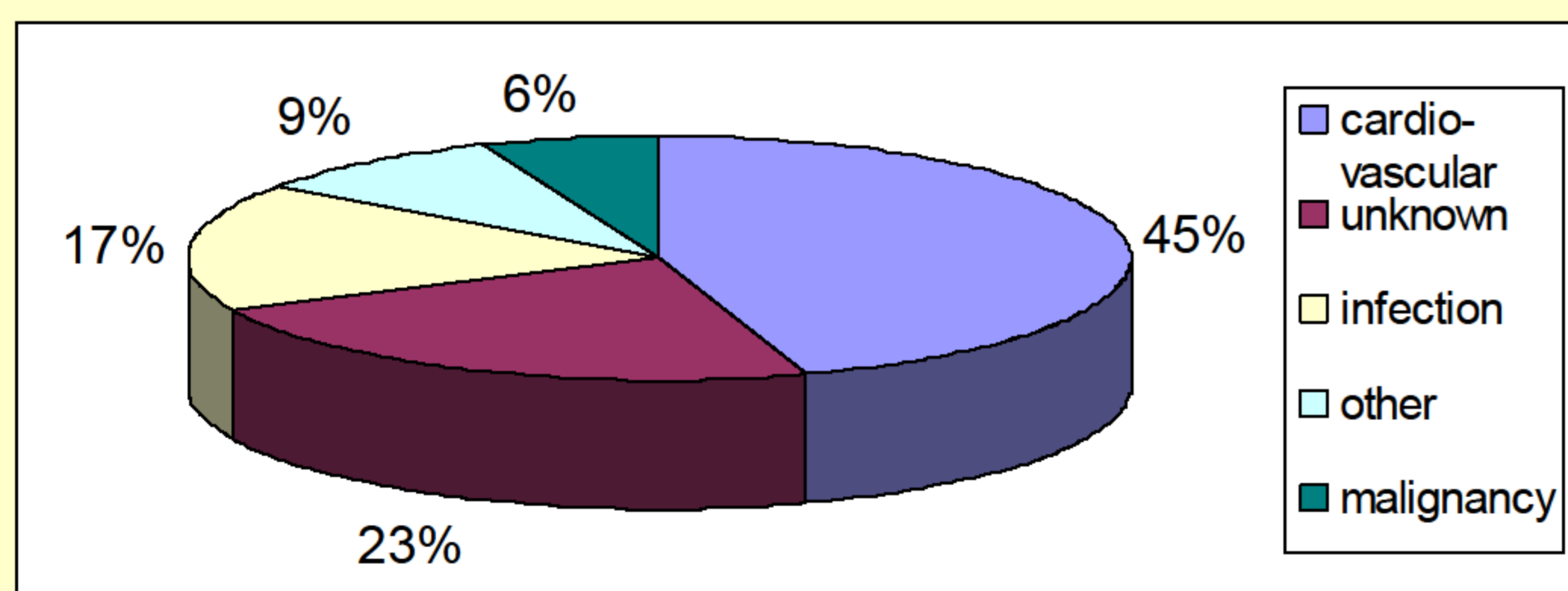


Figure 3: Causes of death.



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## RESULTS

214 patients aged  $\geq 80$  years started renal replacement therapy in the observed period; they represented 13% of all incident (day 1) patients. Median age was 83 (inter-quartile range (IQR) 81-85) years, 48% were male, 26% had diabetes. Most common primary renal diseases were: unknown (34%), nephrosclerosis (22%) and diabetic nephropathy (18%).

### Dialysis prescription

At the end of their first year on RRT (or prior to death for patients not surviving by the end of first year) the dialysis prescription was as follows: all patients were treated with hemodialysis, 10% were treated with convective methods, 29% were treated in single-needle mode; median weekly duration of dialysis was 12 (IQR 8-12) hours; 70% had 3 procedures, 29% had two and 1% had only one procedure weekly. Vascular access is shown in Figure 1.

### Survival

In the observed period 127 (59%) patients died, median survival was 21 months, 1-, 2-, 3- and 5-year survival rates were 68%, 45%, 36% and 18% respectively (see Figure 2). The causes of death are shown in Figure 3. Median expected survival for this group of patients using data from national statistics would be 7.3 years.

## CONCLUSIONS

Very old patients represent a significant proportion of incident dialysis patients. Many are dialyzed only twice weekly or in single-needle mode and AV fistula is used as vascular access in half of patients. Their survival on RRT, while being much shorter compared to healthy, age-matched population, is still good.

