

ARTERIOVENOUS FISTULA OUTCOMES IN THE ELDERLY CKD POPULATION: RESULTS FROM A SINGLE CENTER

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INTRODUCTION

The number of patients on hemodialysis over 75 years is increasing. KDOQI guidelines recommend the arteriovenous fistula (AVF) as the preferred vascular access for patients undergoing hemodialysis. Once functional, AVF exhibit the best long-term primary patency rate and requires the fewest interventions of any type of access. Most importantly, AVFs are associated with the lowest incidence of morbidity and mortality. The outcomes of AVF in the elderly patients are controversial.

The aim of this study is to compare the outcomes of AVF in patients <75 years old (75-group) versus ≥75 years old (75+ group).

METHODS

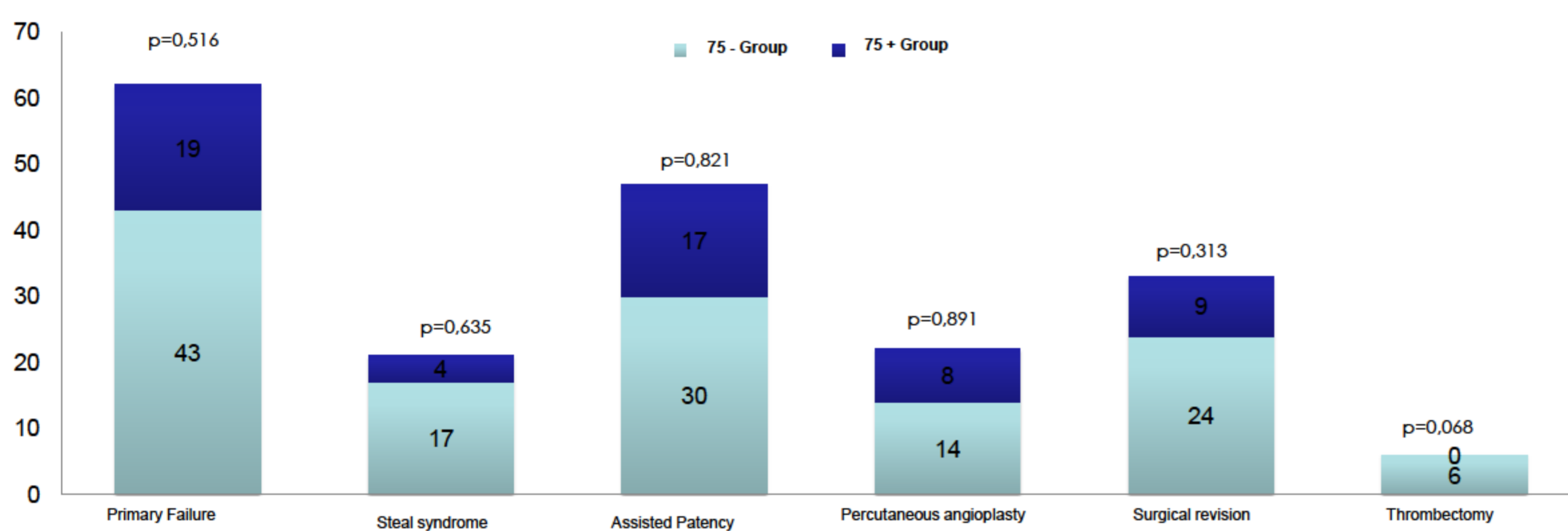
- ✓ Retrospective cohort study
- ✓ AVF created in our hospital between 2007 and 2012.
- ✓ AVF cumulative patency was evaluated using Kaplan-Meier survival analysis and log-rank test.
- ✓ Follow-up time: 12 months.
- ✓ Statistical analysis was performed using the T test and Chi-Square.
- ✓ A Cox model was used to determine factors associated with AVF loss.
- ✓ The significance level for the models were determined as $p < 0.05$.

	75 -	75+
N	199	104
Age (years)	62	78
Gender (M/F)	109/90	70/34
Diabetes (N)	39	96
Location AVF		
•Proximal	71	46
•Distal	127	55

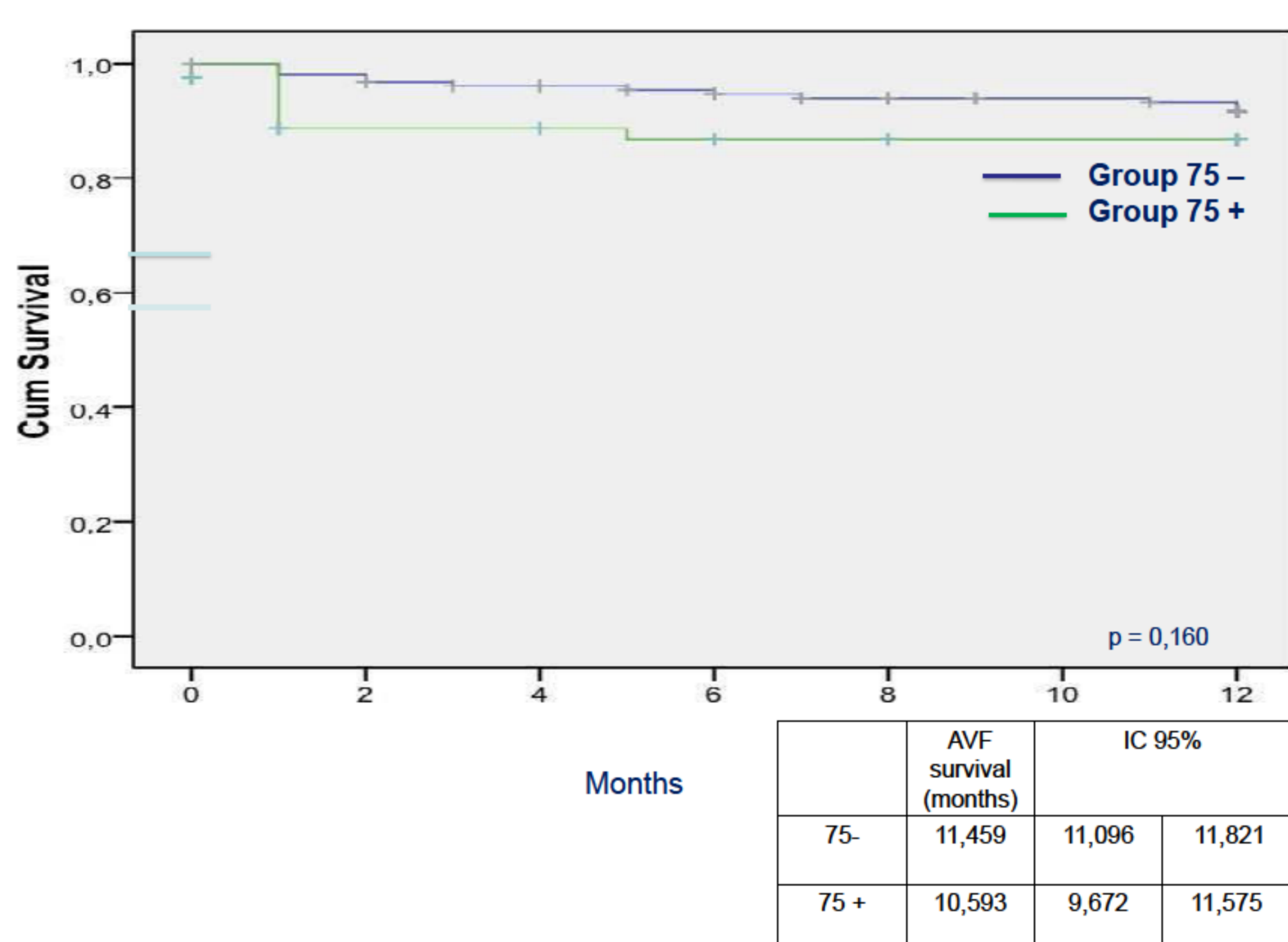
	75 -	75 +	p
Thrombosis (n)	12	8	0,17
Steal syndrome(n)	17	4	0,63
Primary failure(n)	43	19	0,51
Location			
•Proximal	9	6	
•Distal	34	13	

RESULTS

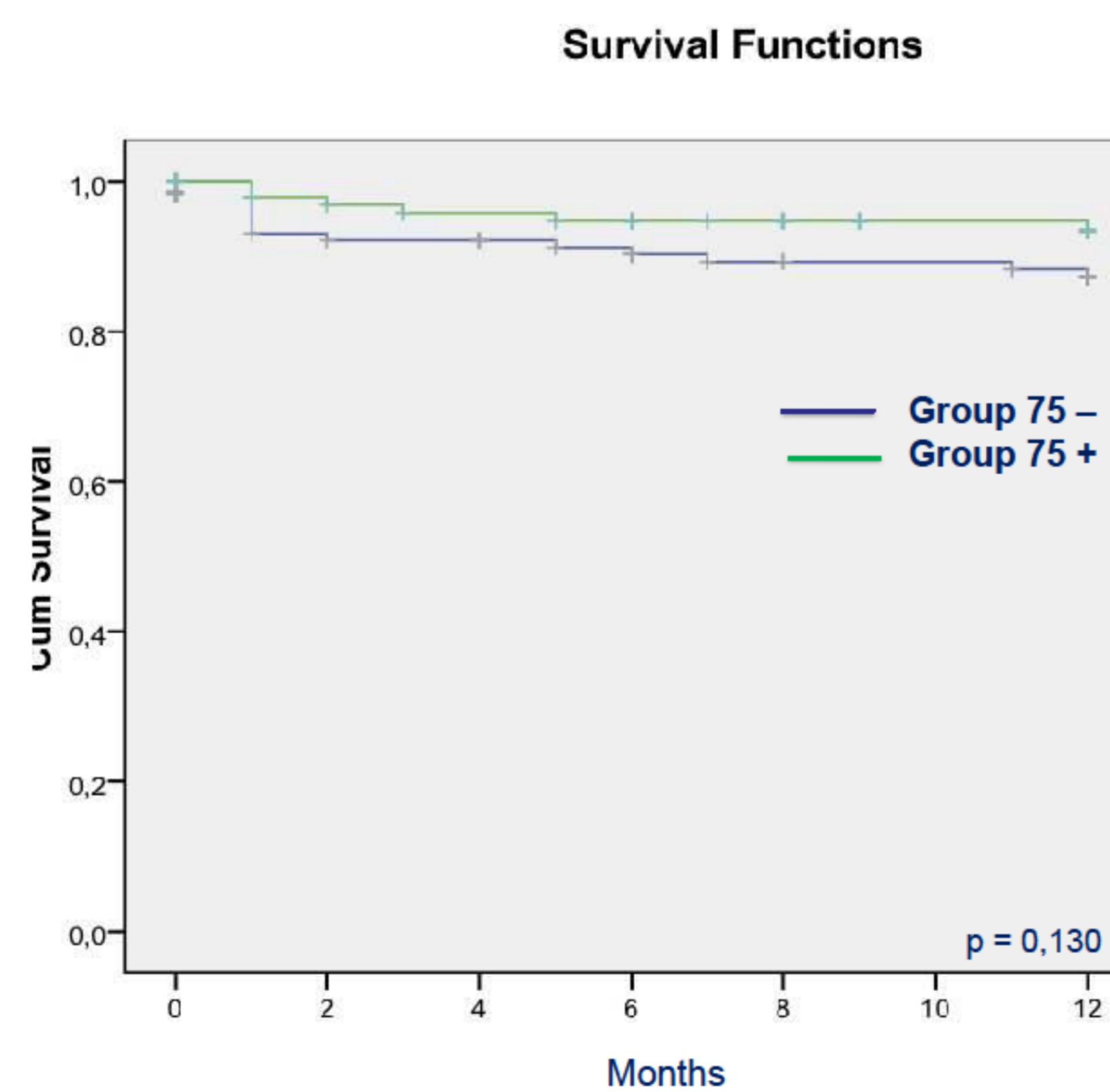
- 303 patients, 104 patients ≥75 years.
- Two groups: similar in the prevalence of diabetes, heart disease and the anatomic site of the AVF.
- The only statistical significant difference between the groups was the existence of a previous AVF. In 75- group 60 (30%) patients had an AVF previously comparing to 15 patients in the older group ($p=0.03$).
- No difference in primary failure, 22% in the 75- group and 19% in the 75+group ($p=0.516$). There is no effect of gender, diabetes and heart failure on AVF survival, according to age group.
- During 12 months follow-up the mean survival time was similar in both groups, 11,4 months (75- group, $p=0,185$) and 10,6 months (75+ group, $p=0,451$). Also there is no differences in the assisted patency.
- The overall total procedure rates were 30 vs 17 respectively ($p= 0,821$) with 14 vs 8 percutaneous angioplasty ($p=0.891$), thrombolysis 6 vs 0 ($p=0.068$) and 24 vs 9 had surgical revision ($p=0,313$) in groups 75- vs 75+ respectively.



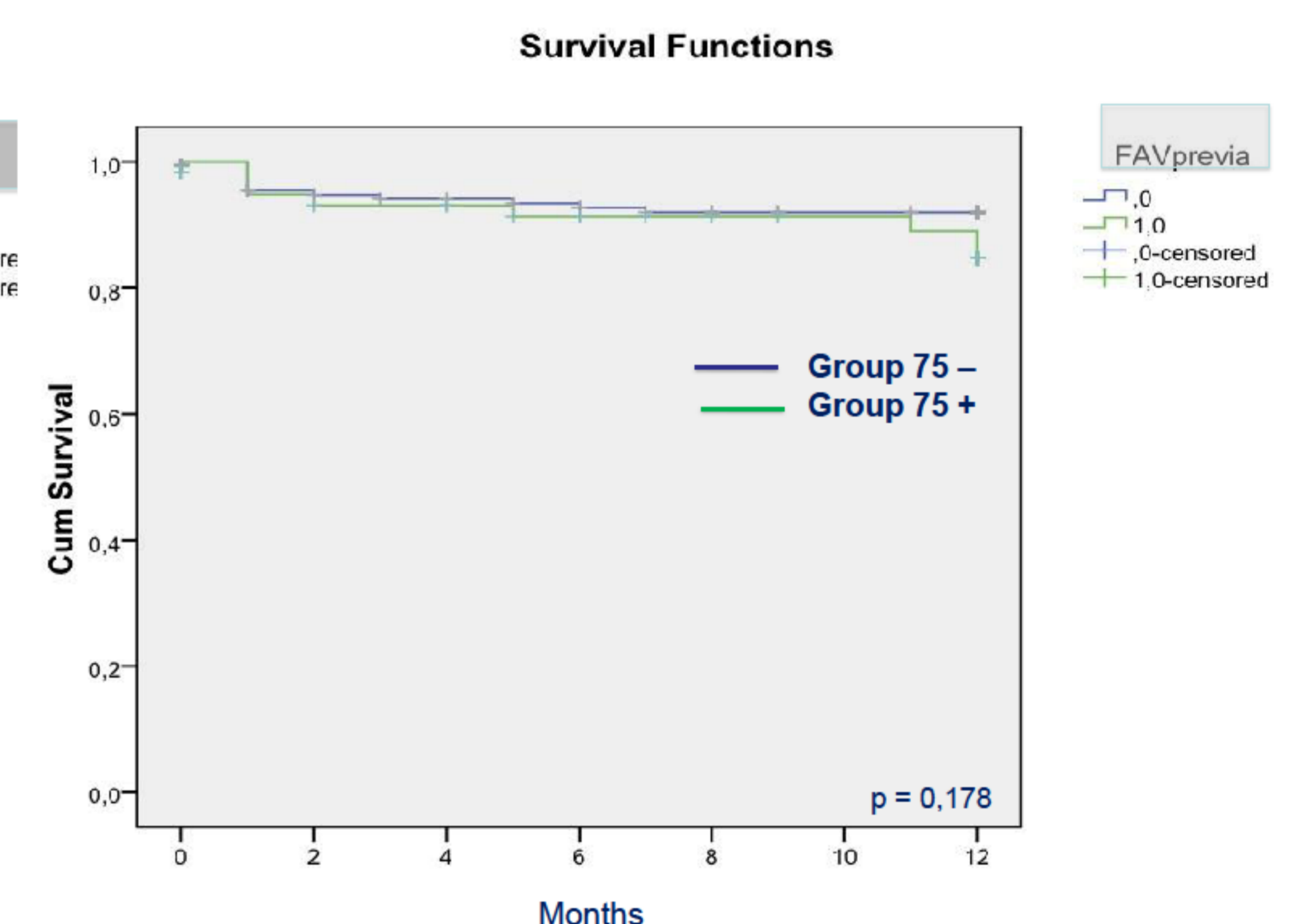
AVF survival



AVF survival



AVF survival



CONCLUSIONS

- In our study we did not find any differences between the two groups in terms of failure to mature, number of procedures or in the cumulative survival.
- In the elderly, AVF should be considered in patients who have a high chance for a successful fistula and age per se should not be a limiting factor when choosing AVF as the optimal permanent access.

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