



SP 507 **FACTORS AFFECTING LONG-TERM TECHNIQUE SURVIVAL OF PERITONEAL DIALYSIS PATIENTS**

M. Theodoridis, S. Panagoutsos, E. Triantafyllidou, P. Kriki, K. Kantartzi, G. Romanidou, P. Passadakis
Department of Nephrology, University Hospital of Alexandroupolis, Alexandroupolis, GREECE

INTRODUCTION AND AIM: "The aim of the study was to retrospectively evaluate the main possible factors that might influence the long-term technique survival for peritoneal dialysis."

Renal replacement therapy using Peritoneal Dialysis (PD) is a well-known effective treatment. The alterations in peritoneal membrane during the time on PD may lead to ultrafiltration failure or/and inadequate clearance of small solutes.

PATIENTS - METHOD : "This is a single center retrospective study conducted for the time period from 1994 to 2014 (20 years) of 319 PD patients"

Patients' characteristics

N= 319 (169 m + 150 f)	Mean values±SD
Age	67.5±12.9 years
PD duration	39.5±28.5 months
Albumin	3.43±0.47 gr/dl
nPCR	0.74±0.22 gr/Kg/day
CRP	2.43±0.37 mg/dl
total Kt/V	2.07±0.76
creatinine D/P	0.75±0.13
MTAC	14.9±6.04 ml/min
Urine volume	479.6±56.36 ml

Diabetes mellitus (DMT2) was present in **108 out of 310** PD patients, while **111** patients were undergoing **APD** and **208 CAPD**. The patients were divided into two groups according to the presence or not of diabetes, according to the modality of PD (CAPD or APD) and according to their membrane transport status

"The technique survival analysis of the PD patients was calculated by Kaplan Meier while the possible effect of any parameter in technique survival rates was evaluated by using Cox Regression analysis"

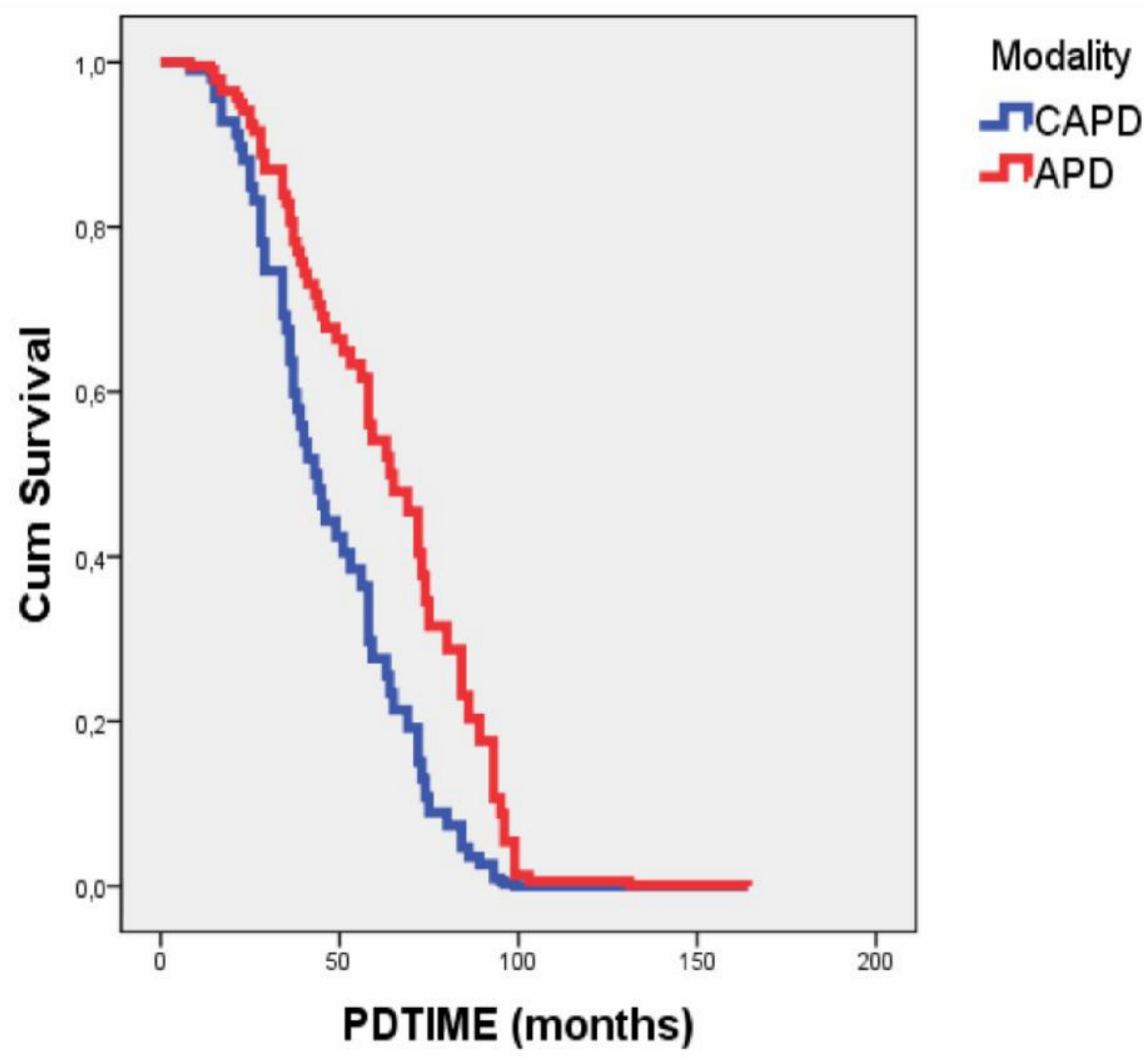
RESULTS: 'Cox Regression analysis revealed that **diabetes, CRP and PD modality and PD adequacy** are statistically important risk factors for long-term technique survival of PD modalities'

Cox Regression results

	Sig	Exp (B)
Diabetes	.000	3.417
CRP	.000	1.186
Hb	0.509	0.920
New or Old PD solution	0.442	0.641
CAPD or APD	0.016	2.635
Albumin	0.112	2.535
nPCR	0.625	1.526
Urine volume	0.539	1.000
Kt/V total	0.001	3.926
Creatinine D/P	0.197	0.018

The cumulative survival using Kaplan-Meier analysis was **better** in the group with **no-diabetic** patients when compared with group with diabetic PD patients (Log Rank test p<0,01) as well as in **patients using APD** instead of CAPD (Log Rank test p<0,01)

Table 1 : Kaplan Meier technique survival according to the modality of PD



CONCLUSIONS:

These results indicate that **the presence of diabetes and the existence of chronic inflammation** as indicated by CRP values have a **negative impact** on the long-term technique survival rates of peritoneal dialysis, while patients undergoing **APD** might **have better technique survival rates** than those undergoing CAPD