

# EARLY MORTALITY PREDICTORS IN HAEMODIALYSIS

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## INTRODUCTION

Mortality in the first 90 days of haemodialysis (HD) reaches important values. While long-term mortality predictors are well defined, early ones are not.

## GOAL

Evaluate the mortality predictors in the first 90 days of HD's incident patients.

## MATERIAL AND METHODS

A retrospective observational study of HD's incident patients between 1 January 2010 and 30 September 2014 was conducted. The major comorbidities were evaluated and related with mortality in the first 90 days.

## RESULTS

Total =235	Dead at 90 days 33 (14%)	Alive at 91 days 202 (86%)	<i>p</i>
Male gender	19 (57,6%)	133 (65,8%)	0,430
Age (years)	79,55 ± 9,78	69,27 ± 15,07	0,000
Age > 80 years	20 (60,6%)	57 (28,2%)	0,001
GFR (mL/min/1,73m <sup>2</sup> ) (MDRD-EPI)	8,4 ± 5,90	9,2 ± 4,01	0,370
Diabetes mellitus	13 (39,4%)	86 (42,6%)	0,850
Hypertension	24 (72,7%)	159 (78,7%)	0,498
Heart failure	8 (24,2%)	16 (7,9%)	0,010
Ischemic heart disease	9 (27,3%)	20 (9,9%)	0,009
Peripheral arterial disease	5 (15,2%)	15 (7,4%)	0,170
Dementia	10 (30,3%)	9 (4,5%)	0,000
Cancer	10 (30,3%)	20 (9,9%)	0,003
Nephrology care before dialysis start	16 (48,5%)	166 (82,2%)	0,000
Urgent dialysis start	29 (87,9%)	87 (43,1%)	0,000
Dialysis start with central venous catheter	28 (84,8%)	5 (2,5%)	0,000
Average albumin (g/dL)	2,47 ± 0,95	3,07 ± 0,65	0,000
Average phosphate (mg/dL)	5,51 ± 1,74	5,91 ± 1,52	0,168
Average haemoglobin (g/dL)	9,34 ± 1,88	10,28 ± 1,72	0,004
Average CRP (mg/dL)	5,4 ± 5,15	2,94 ± 4,44	0,004

Table 1- Characterization of HD's incident patients in the period between 2010 and 2014 (Chi-square and T-student).

	OR	IC 95%	<i>p</i>
Heart failure	4,47	1,21-16,50	0,025
Ischemic heart disease	3,57	1,08-11,75	0,037
Cancer	4,64	1,48-14,54	0,008
Dementia	15,94	4,09-62,10	<0,001
Dialysis start with central venous catheter	12,29	3,54-42,65	<0,001

Table 2- Risk Factors for Mortality in the first 90 days (logistic regression model).

## CONCLUSION

The first 90 days after initiation of dialysis is a period of especially high risk of death. We have identified the main early mortality predictors in HD's incident patients. Dementia was the leading risk factor predicting mortality in our patients. Despite the ethical questions these results may be guiding in patients who need to start regular HD program.

