# Residual renal function and cardiovascular morbidity in the end stage of renal disease

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#### INTRODUCTION

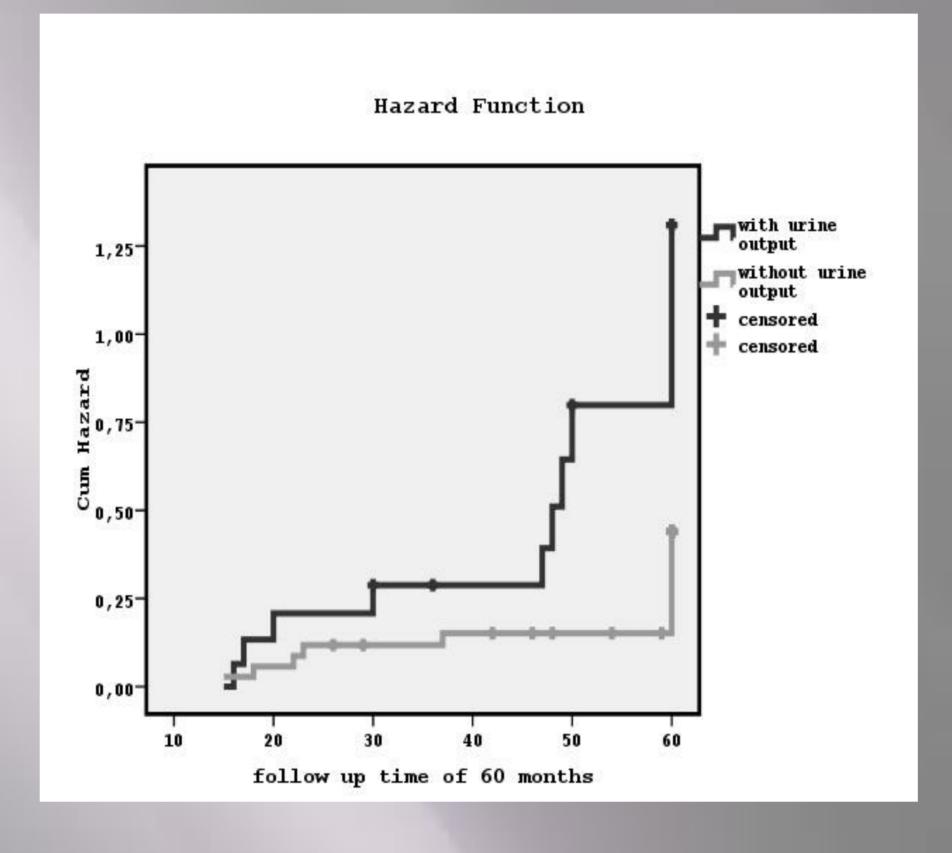
Residual renal function provides several benefits to patients in permanent renal replacement therapy

#### AIM

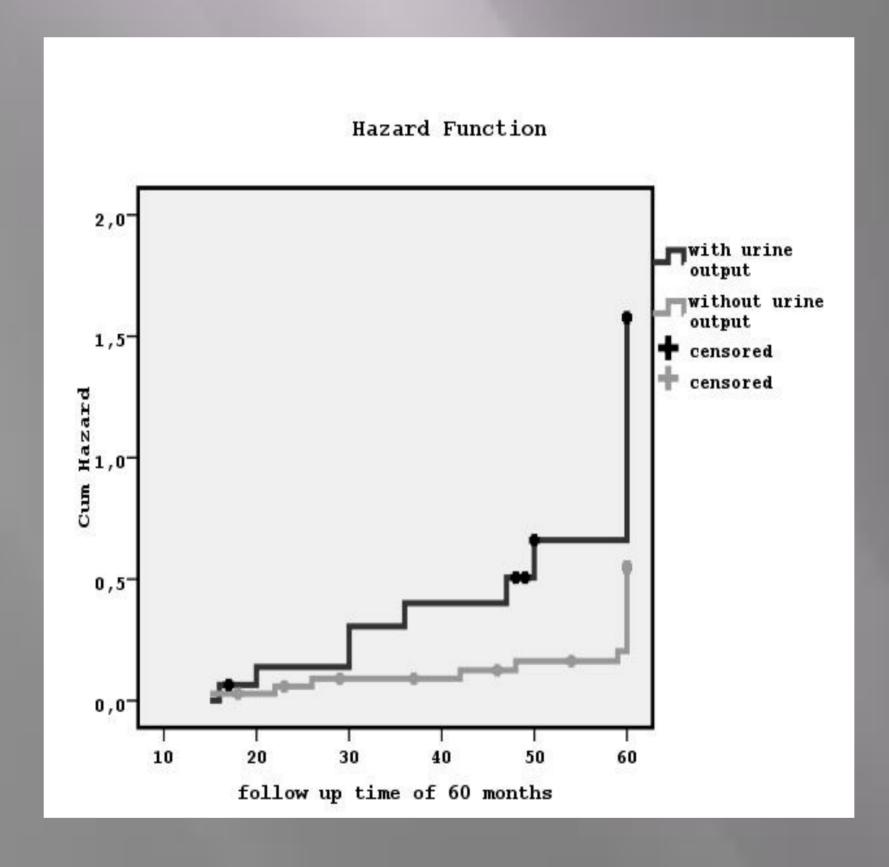
We examined the relationship between preserved residual renal function and cardiovascular morbidity in hemodiafiltration patients during a follow up time of 60 months.

### METHODS

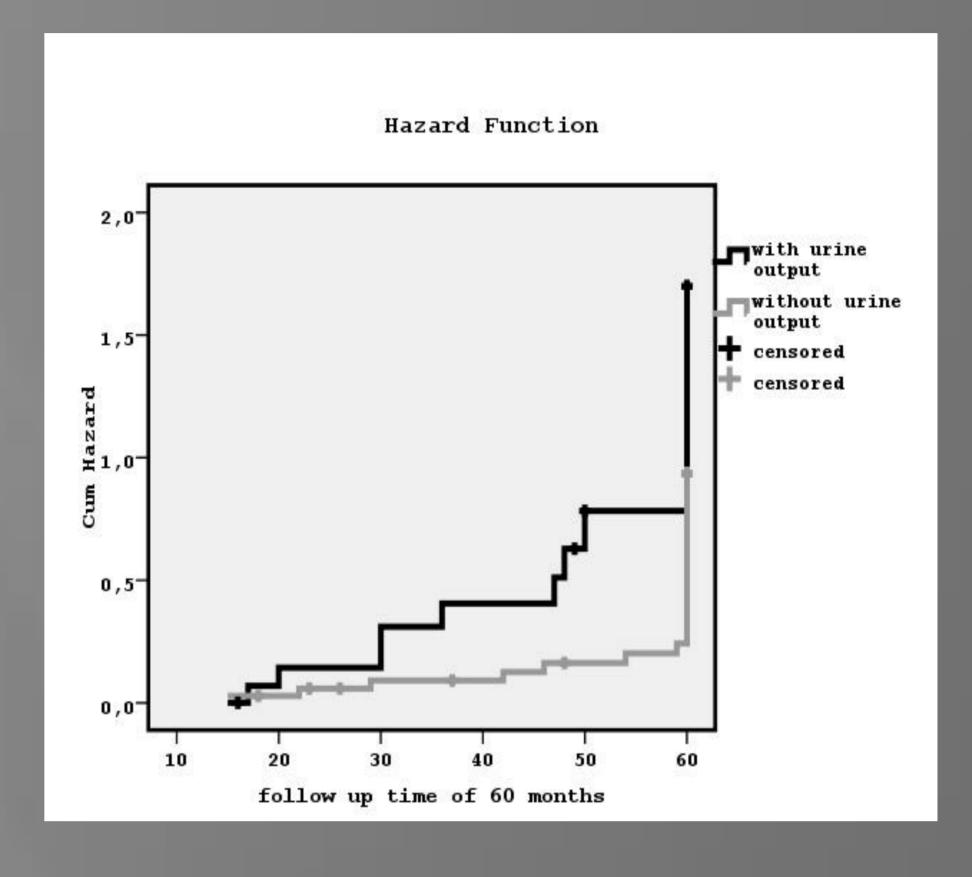
- We studied 52 patients in on-line-predilution hemodiafiltration.
- •RRF was defined by interdialytic urine output more than 100ml.
- •Compliance to diet and medications reception was calculated by written questionnaire.
- High sensitivity C-reactive protein (hsCRP) and oxidized low density lipoprotein (ox-LDL) were measured by ELISA.
- •Kaplan-Meier curves and Cox regression models were performed to predict left ventricular hypertrophy (LVH), coronary artery disease (CAD), systolic and diastolic dysfunction.



The relationship between hypertension and preservation or not of residual renal function (log-rank=7.4, p=0.007).



Association between the preservation or not of residual renal function and non-compliance concerning both diet and medications reception i(log-rank=6.5, p=0.01).



The relationship between the prevalence of left ventricular hypertrophy and preservation or not of residual renal function (log-rank=5.13, p=0.02).

The patients with preserved RRF had lower hsCRP and ox-LDL serum levels than the patients without RRF, as a benefit from urine volume preservation

## CONCLUSION

In spite of the benefit from the preservation of residual renal function in patients in permanent hemodialysis, they may suffer from elevated left ventricular hypertrophy connected to uncontrolled blood pressure, if they do not follow the recommended dietary and pharmaceutical hemodialysis rules, due to preserved urine volume.





