Abstract: **P170**

**Serum uromodulin predicts mortality independently from the presence of type 2 diabetes**

**Authors:**
A Leiherer¹, A Muendlein¹, CH Saely², EM Brandtner¹, A Mader³, KM Ebner³, B Larcher³, C Heinzle¹, P Fraunberger⁴, H Drexel⁵, ¹VIVIT Institute - Feldkirch - Austria, ²Private University of the Principality of Liechtenstein - Triesen - Liechtenstein, ³Academic Teaching Hospital, Department of Medicine and Cardiology - Feldkirch - Austria, ⁴Medical Central Laboratory, Academic Teaching Hospital Feldkirch - Feldkirch - Austria, ⁵Drexel University College of Medicine - Philadelphia - United States of America,

**Topic(s):**
Basic Science - Vascular Diseases: Biomarkers

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**Introduction:**

Uromodulin is produced exclusively by the kidneys and present in urine and blood. Low serum uromodulin has recently been demonstrated to be associated with chronic kidney disease and type 2 diabetes (T2DM).

**Purpose:**

The purpose of this study was to investigate whether serum uromodulin also is a useful predictor of mortality.

**Methods:**

We measured uromodulin in a series of 529 patients who underwent coronary angiography for the evaluation of established or suspected stable CAD and prospectively recorded mortality during a follow-up of up to 8 years.

**Results:**

Uromodulin significantly correlated with eGFR (r=0.242, p<0.001) and, inversely, with age (r=-0.208, p<0.001), fasting glucose (r=-0.161, p<0.001), C-reactive protein (CRP; r=-0.133, p=0.002) and proBNP (r=-0.164, p=0.002); it was significantly lower in patients with T2DM than in nondiabetic subjects (148±70 vs. 171±79; p =0.001). Prospectively, we recorded 95 deaths; mortality was significantly higher in patients with T2DM than in those who did not have diabetes (28.2 vs. 14.6 %; p <0.001). Serum uromodulin proved protective for overall mortality in univariate analysis (HR=0.56 [95%CI 0.43-0.72]; p<0.001), and also after multivariate adjustment for standard risk factors including diabetes, eGFR, proBNP and presence of CAD as well (adj. HR=0.57 [95%CI 0.37-0.89]; p=0.014).

**Conclusion:**

We conclude that serum uromodulin predicts mortality independently from kidney function and the presence of T2DM.
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1 VIVIT Institute - Feldkirch - Austria, 2 Private University of the Principality of Liechtenstein - Triesen - Liechtenstein, 3 Academic Teaching Hospital, Department of Medicine and Cardiology - Feldkirch - Austria, 4 Medical Central Laboratory, Academic Teaching Hospital Feldkirch - Feldkirch - Austria, 5 Drexel University College of Medicine - Philadelphia - United States of America

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Conclusion:
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Figure 1: Survival with respect to uromodulin concentration.
The Kaplan Meier plot indicates the overall survival in the total study population of patients with low and high uromodulin concentration according to the low tertile cut-off (125.3 ng/ml). The low uromodulin group is represented by a dashed and the group with respectively higher uromodulin concentrations by a solid line. The log Rank p-values were <0.001.