Angiotensin Receptor Blocker normally. Based on whether the renal biopsy specimens were deposited by complement 3, the patients were divided into two groups. This study selected eGFR<45 ml/min/1.73 m² or dialysis as end points. At the end of follow-up, the difference of serum creatinine and 2-year renal survival rates were compared. 

**Results:** The group with complement 3 deposited has higher 24-hour proteinuria (3.4 ± 1.6 vs 4.5 ± 2.0, P = 0.039), however, clinical data of patients at baseline showed no differences in systolic and diastolic blood pressures, BMI, FBG, HbA1c, Albumin and sCr between the two groups. More than sixty presents subjects (87%) received renin angiotensin system blocker. After two years of follow-up, 29.2% (21/72) patients progress to eGFR < 45 ml/min/1.73 m². And the cumulative progression rate by two years was 38.7% (12/31) for patients in the C3 positive group and 19.1% (9/47) for patients in the C3 negative group. The survival of stable renal function during the study was similar between two groups (P = 0.052). In the subgroup analysis of patients without nephrotic syndrome, patients in the C3 positive group were less likely to progress to eGFR < 45 ml/min/1.73 m² than those in the C3 negative group (P = 0.007). In a multivariate model, we found C3 positive (HR, 2.726; 95% CI, 1.108–6.703) was a risk factor for progressive renal function.

**Conclusion:** The deposition of complement 3 has a certain degree influence on the prognosis of nodular sclerosis of diabetic nephropathy. 

Fig. 5. Survival based on C3. (A) Total patients. (B) Patients without nephrotic syndrome. (C) Patients with nephrotic syndrome.

http://dx.doi.org/10.1016/j.hkjn.2015.08.007

0036 Urinary Tubular Biomarkers Predict Renal Injurious Progress in Early Diabetic Nephropathy Patients
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**Objectives:** Diabetic nephropathy (DN) is a dominant cause of end-stage renal disease in China. The early diagnosis of DN has focused on measurement of UAlb excretion rate, but it is not sensitive marker for DN patients with inurate injuries in glomeruli and renal tubules. This study thus aimed to evaluate clinical significance of urinary tubular biomarkers in predicting development of DN patients at early stage.

**Methods:** The study was performed on 92 diabetes mellitus with different levels of UAlb and certain range of Scr (<106 µmol/L). According to albumin-to-creatinine ratio (ACR) in urine, all patients were categorized into 3 groups, normoalbuminuria (A) group, microalbuminuria (B) group and macroalbuminuria (C) group. In addition to UAlb, Scr and ACR, levels of tubular biomarkers including UNAG, URBP and UCysC in urine were tested respectively before renal protective drugs intervention.

**Results:** Compared with A group, levels of UNAG, URBP and UCysC in B and C groups were significantly different (P < 0.01). Along with UAlb, stepwise increases in levels of UNAG, URBP and UCysC were detected respectively in B and C groups. Moreover, in univariate analysis, there was immediate relevance between UAlb, ACR and tubular biomarkers including UNAG (r = 0.706, P < 0.01; r = 0.808, P < 0.001), URBP (r = 0.687, P < 0.01; r = 0.701, P < 0.001) and UCysC (r = 0.727, P < 0.01; r = 0.790, P < 0.001) in all groups. In addition, we found that UNAG was positively correlated with URBP (r = 0.652, P = 0) and UCysC (r = 0.785, P = 0). Aspirin ameliorated the glomerular endothelial injury compared to the DM group. Multivariate logistic regression showed that body mass index and fasting blood glucose were two predictive factors of increased UCysC.

**Conclusion:** At early stage of DN, increased levels of UNAG, URBP and UCysC are independently associated with UAlb, and these urinary tubular biomarkers similar to UAlb may be widely used as practical targets in clinic in detecting and managing DN, and predicting renal tubular damaged progression.

http://dx.doi.org/10.1016/j.hkjn.2015.08.009

0037 A Novel Therapy for Type-2 Diabetic Nephropathy by Targeting Smad3-dependent IncRNA_5318
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**Objective:** Increasing evidence shows that non-coding RNAs play an important role in kidney disease. Recently, we identified Smad3-dependent IncRNAs related to renal fibrosis by high-throughput RNA-sequencing. In this study, we investigated the role and therapeutic potential of IncRNA_5318 in type-2 diabetic nephropathy (T2DN).

**Methods:** Expression of IncRNA_5318 in the diabetic kidney of db/db mice was examined by real-time PCR. The role and therapeutic effect of IncRNA_5318 on T2DN were determined by knocking down IncRNA_5318 from the diabetic kidney using an ultrasound-microbubble-mediated shRNA