Our study provides direct evidence of the pathogenic role of IL-20 in the development of renal fibrosis, possibly through the IL-24 cytokine subfamily production.

**RESULTS:** Treatment of renal epithelial cells with IL-24 increased their TGF-β1 expression. IL-19, IL-24 and IL-20Rα expression of human proximal tubular epithelial (HK-2) cells by real-time RT-PCR were measured.

**CONCLUSIONS:** Regardless of the etiology, kidney fibrosis is the final outcome of progressive kidney diseases. Our recent study showed that levels of interleukin-24 (IL-24) in renal epithelial cells were increased, suggesting a potential role in the development of renal fibrosis. Further studies are needed to clarify the precise role of IL-24 in the pathomechanism of renal fibrosis.

**METHODS:** We hypothesized that MafB might play a protective role against FSGS. To test this hypothesis, MafB podocyte-specific transgenic (TG) mice were treated with adriamycin (Adria) to induce FSGS. The kidneys of MafB TG mice and wild-type (WT) littermates were analyzed for FSGS-related parameters.

**RESULTS:** In MafB TG mice, there was a significant reduction in the development of FSGS compared to WT littermates. The expression of MAFB in podocytes was also reduced in mice treated with Adria, indicating a protective role of MafB against FSGS.

**CONCLUSIONS:** MafB podocyte-specific transgenic mice showed reduced maintenance and the FSGS pathogenesis. Moreover, we found glomerular MAFB depletion in human FSGS cases, suggesting that MafB might be a potential therapeutic target for FSGS.

**INTRODUCTION AND AIM:** An accurate assessment of renal function is mandatory in the majority of urological and oncological patients to prevent renal impairment and cancer non-related deaths. Nowadays, the large part of clinicians apply CKD-EPI/MDRD formulas or 24h creatinine clearance to determine the glomerular filtration rate (GFR) before and after renal surgery (for cancer, donation, stones and pyelouretheral junction stenosis) and in metastatic patients for establish the right oncological treatment. Unfortunately, estimated GFR (eGFR) displays a wide error in reflecting real kidney function with measured GFR (mGFR) and this may lead to important consequences in the correct evaluation of patients.

**METHODS:** A retrospective and prospective study based on 1001 pts composed by 665 pts with uro-oncological cancer (444) or renal functional diseases (221), by 210 pts with non-urological cancer and by 126 pts with nephropathic disease was performed in two different centers to compare eGFR formula with renal scintigraphy (N=1001). The agreement between eGFR and mGFR was evaluated using total deviation index (TDI) and concordance correlation coefficient (CCC).

**RESULTS:** The agreement between formulas and mGFR was poor. The TDI for MDRD was 80% and for CKD-EPI was 74%, indicating that 26% of the estimations for both formulas were included within a margin of error from mGFR of about ± 74 to 80%. CCC for MDRD was 0.73 and for CKD-EPI was 0.77, indicating poor concordance between eGFR and mGFR. The population, using eGFR formula (CKD-EPI/MDRD), was composed by 29%-22% of CKD stage I pts (eGFR > 90 ml/min), 33%-35% CKD stage II, 15%-19% CKD stage III, 14%-15% CKD stage IIIb, 8%-8% CKD stage IV, 1%-1% CKD stage V. Using Renal Scintigraphy measurements, we revealed these different proportions: 33% CKD I, 30% CKD II, 19% CKD IIIa, 13% CKD IIIb, 5% CKD IV, 0% CKD V. Moreover, the discrepancy between mGFR with renal scintigraphy and eGFR with formulas was of 30% in CKD I, 54% in CKD II, 63% in CKD IIIa, 62% in CKD IIIb, 63% in CKD IV, 81% in CKD V stage.

**CONCLUSIONS:** CKD-EPI and MDRD formula may over or underestimate mGFR in pts, generating false evaluations in the clinical management and drug therapies for oncological, urological and kidney donor patients. We suggest to use mGFR with renal scintigraphy in selected cases when GFR is crucial to determine the surgical/therapeutic approach.