

# Nephrology Models

## In-vivo Efficacy

### In House Models:

- ➲ Acute Kidney Injury  
(ischemia, inflammation, endothelial und tubular cell death)
- ➲ 5/6 Nephrectomy  
(glomerular hypertension and glomerulosclerosis)
- ➲ Unilateral Ureteral Obstruction  
(loss of renal parenchyma and fibrosis)
- ➲ Renal Artery Stenosis  
(hypertension, renal fibrosis and tubular degeneration)
- ➲ Renal Transplantation  
(acute and chronic allograft rejection)
- ➲ Aortic Transplantation  
(vascular rejection and neo-intima formation)
- ➲ Diabetes Induction Model  
(Streptozotocin > mild diabetic nephropathy, insulin-dependent)
- ➲ Diabetes Mutation Model  
(BTBR Ob/Ob mice)

### In House Analysis:

- ➲ Direct Organ Function
- ➲ Hematology
- ➲ Light Cycler PCR (Renal tissue)
- ➲ ELISA (biomarkers: e.g. Kim-1, NGAL, NAG)
- ➲ FACS (peripheral blood/tissue)
- ➲ Multiplex Analysis (cytokines)
- ➲ CellAnalysis (inflammatory cells)
- ➲ Renal tissue analysis  
(macrophages)