

1. Maciej-Hulme ML, Van Gemst JJ, Sanderson P, Rops ALWMM, Berden JH, Smeets B, Amster IJ, Rabelink TJ, Van Der Vlag J. Glomerular endothelial glycocalyx-derived heparan sulfate inhibits glomerular leukocyte influx and attenuates experimental glomerulonephritis. *Front Mol Biosci.* 2023;10:1177560. doi: 10.3389/fmbo.2023.1177560. eCollection 2023.
2. Yousef Yengej FA, Jansen J, Ammerlaan CME, Dilmen E, Pou Casellas C, Masereeuw R, Hoenderop JG, Smeets B, Rookmaaker MB, Verhaar MC, Clevers H. Tubuloid culture enables long-term expansion of functional human kidney tubule epithelium from iPSC-derived organoids. *Proc Natl Acad Sci U S A.* 2023 Feb 7;120(6).
3. Eymael J, van den Broek M, Miesen L, Monge VV, van den Berge BT, Mooren F, Velez VL, Dijkstra J, Hermsen M, Bández P, Vermeulen M, de Wildt S, Willemsen B, Florquin S, Wetzel R, Steenbergen E, Kramann R, Moeller M, Schreuder MF, Wetzel JF, van der Vlag J, Jansen J, Smeets B. Human scattered tubular cells represent a heterogeneous population of glycolytic dedifferentiated proximal tubule cells. *J Pathol.* 2023 Feb;259(2):149-162.
4. Jia T, Xu T, Smeets B, Buhl EM, Moeller MJ, Floege J, Klinkhammer BM, Boor P. The Role of Platelet-Derived Growth Factor in Focal Segmental Glomerulosclerosis. *J Am Soc Nephrol.* 2023 Feb 1;34(2):241-257.
5. Veissi ST, Smeets B, van Wijk JAE, Classens R, van der Velden TJAM, Jeronimus-Klaasen A, Veltkamp F, Mak-Nienhuis EM, Morello W, Montini G, Bouts AHM, van den Heuvel LPWJ, Schreuder MF. Circulating Permeability Factors in Focal Segmental Glomerulosclerosis: In Vitro Detection. *Kidney Int Rep.* 2022 Dec;7(12):2691-2703.
6. Xu Y, Kuppe C, Perales-Patón J, Hayat S, Kranz J, Abdallah AT, Nagai J, Li Z, Peisker F, Saritas T, Halder M, Menzel S, Hoeft K, Kenter A, Kim H, van Roeyen CRC, Lehrke M, Moellmann J, Speer T, Buhl EM, Hoogenboezem R, Boor P, Jansen J, Knopp C, Kurth I, Smeets B, Bindels E, Reinders MEJ, Baan C, Gribnau J, Hoorn EJ, Steffens J, Huber TB, Costa I, Floege J, Schneider RK, Saez-Rodriguez J, Freedman BS, Kramann R. Adult human kidney organoids originate from CD24(+) cells and represent an advanced model for adult polycystic kidney disease. *Nat Genet.* 2022 Nov;54(11):1690-1701.
7. Veissi ST, Smeets B, van Wijk JAE, van der Velden T, van den Heuvel LPWJ, Schreuder MF. Plasma exchange or immunoabsorption for recurrent focal segmental glomerulosclerosis: clear differences in vitro. *Nephrol Dial Transplant.* 2022 Oct 19;37(11):2293-2294.
8. Hermsen M, Ciompi F, Adefidipe A, Denic A, Dendooven A, Smith BH, van Midden D, Bräsen JH, Kers J, Stegall MD, Bández P, Nguyen T, Swiderska-Chadaj Z, Smeets B, Hilbrands LB, van der Laak JAWM. Convolutional Neural Networks for the Evaluation of Chronic and Inflammatory Lesions in Kidney Transplant Biopsies. *Am J Pathol.* 2022 Oct;192(10):1418-1432.
9. den Braanker D, Maas R, Parr N, Deegens J, Smeets B, Wetzel J, van der Vlag J, Nijenhuis T. Novel mouse strains to study circulating permeability factor(s) in primary focal segmental glomerulosclerosis. *PLoS One.* 2022;17(9):e0274959.

10. Broek MVD, Smeets B, Schreuder MF, Jansen J. The podocyte as a direct target of glucocorticoids in nephrotic syndrome. *Nephrol Dial Transplant*. 2022 Sep 22;37(10):1808-1815.
11. Reimer KC, Jansen J, Overheul GJ, Miesen P, van Rij RP, Triana SH, Smeets B, Schneider RK, Kramann R. Using human iPSC-derived kidney organoids to decipher SARS-CoV-2 pathology on single cell level. *STAR Protoc*. 2022 Sep 16;3(3):101612.
12. Jansen J, van den Berge BT, van den Broek M, Maas RJ, Daviran D, Willemsen B, Roverts R, van der Kruit M, Kuppe C, Reimer KC, Di Giovanni G, Mooren F, Nlandu Q, Mudde H, Wetzel R, den Braanker D, Parr N, Nagai JS, Drenic V, Costa IG, Steenbergen E, Nijenhuis T, Dijkman H, Endlich N, van de Kar NCAJ, Schneider RK, Wetzel JFM, Akiva A, van der Vlag J, Kramann R, Schreuder MF, Smeets B. Human pluripotent stem cell-derived kidney organoids for personalized congenital and idiopathic nephrotic syndrome modeling. *Development*. 2022 May 1;149(9).
13. Merkx RIJ, Rijkema M, Franssen GM, Kip A, Smeets B, Morgenstern A, Bruchertseifer F, Yan E, Wheatcroft MP, Oosterwijk E, Mulders PFA, Heskamp S. Carbonic Anhydrase IX-Targeted α-Radionuclide Therapy with 225Ac Inhibits Tumor Growth in a Renal Cell Carcinoma Model. *Pharmaceuticals (Basel)*. 2022 May 2;15(5).
14. Eymael J, Willemsen B, Xu J, Mooren F, Steenbergen E, Wetzel JF, Dijkman H, Jansen J, Van der Vlag J, Smeets B. Motile Cilia on Kidney Proximal Tubular Epithelial Cells Are Associated With Tubular Injury and Interstitial Fibrosis. *Front Cell Dev Biol*. 2022;10:765887. doi: 10.3389/fcell.2022.765887. eCollection 2022.
15. Miesen L, Bándi P, Willemsen B, Mooren F, Strieder T, Boldrini E, Drenic V, Eymael J, Wetzel R, Lotz J, Weiss N, Steenbergen E, van Kuppevelt TH, van Erp M, van der Laak J, Endlich N, Moeller MJ, Wetzel JFM, Jansen J, Smeets B. Parietal epithelial cells maintain the epithelial cell continuum forming Bowman's space in focal segmental glomerulosclerosis. *Dis Model Mech*. 2022 Mar 1;15(3).
16. Hermsen M, Smeets B, Hilbrands L, van der Laak J. Artificial intelligence: is there a potential role in nephropathology?. *Nephrol Dial Transplant*. 2022 Feb 25;37(3):438-440.
17. Jansen J, Reimer KC, Nagai JS, Varghese FS, Overheul GJ, de Beer M, Roverts R, Daviran D, Fermin LAS, Willemsen B, Beukenboom M, Djurdjaj S, von Stillfried S, van Eijk LE, Mastik M, Bulthuis M, Dunnen WD, van Goor H, Hillebrands JL, Triana SH, Alexandrov T, Timm MC, van den Berge BT, van den Broek M, Nlandu Q, Heijnert J, Bindels EMJ, Hoogenboezem RM, Mooren F, Kuppe C, Miesen P, Grünberg K, Ijzermans T, Steenbergen EJ, Czogalla J, Schreuder MF, Somerdijk N, Akiva A, Boor P, Puelles VG, Floege J, Huber TB, van Rij RP, Costa IG, Schneider RK, Smeets B, Kramann R. SARS-CoV-2 infects the human kidney and drives fibrosis in kidney organoids. *Cell Stem Cell*. 2022 Feb 3;29(2):217-231.e8.
18. Diepeveen LE, Stegemann G, Wiegerinck ET, Roelofs R, Naber M, Lóreal O, Smeets B, Thévenod F, Swinkels DW, van Swelm RPL. Investigating the Molecular Mechanisms of Renal Hepcidin Induction and Protection upon Hemoglobin-Induced Acute Kidney Injury. *Int J Mol Sci*. 2022 Jan 25;23(3).

19. van Swelm RPL, Beurskens S, Dijkman H, Wiegerinck ETG, Roelofs R, Thévenod F, van der Vlag J, Wetzels JFM, Swinkels DW, Smeets B. Kidney tubule iron loading in experimental focal segmental glomerulosclerosis. *Sci Rep.* 2022 Jan 24;12(1):1199.
20. van Gemst JJ, Passmann NJHG, Rops ALWMM, van Kuppevelt TH, Berden JH, Loeven MA, Rabelink TJ, Smeets B, van der Vlag J. Blocking of inflammatory heparan sulfate domains by specific antibodies is not protective in experimental glomerulonephritis. *PLoS One.* 2021;16(12):e0261722. doi: 10.1371/journal.pone.0261722. eCollection 2021.
21. Miesen L, Wetzels R, Eymael J, Mooren F, Villacorta Monge V, van den Berge BT, van den Broek M, van der Velden TJAM, van den Heuvel LPWJ, Wetzels JFM, Schreuder MF, van der Vlag J, Jansen J, Smeets B. Establishment and characterization of a novel conditionally immortalized human parietal epithelial cell line. *Exp Cell Res.* 2021 Aug 15;405(2):112712.
22. Hermsen M, Volk V, Bräsen JH, Geijs DJ, Gwinner W, Kers J, Linmans J, Schaadt NS, Schmitz J, Steenbergen EJ, Swiderska-Chadaj Z, Smeets B, Hilbrands LB, Feuerhake F, van der Laak JAWM. Quantitative assessment of inflammatory infiltrates in kidney transplant biopsies using multiplex tyramide signal amplification and deep learning. *Lab Invest.* 2021 Aug;101(8):970-982.
23. Verschijden LFM, van Hattem AC, Pertuis JCLM, de Jongh CA, Verdijk RM, Smeets B, Koenderink JB, Russel FGM, de Wildt SN. Developmental patterns in human blood-brain barrier and blood-cerebrospinal fluid barrier ABC drug transporter expression. *Histochem Cell Biol.* 2020 Sep;154(3):265-273.
24. Eymael J, Miesen L, Mooren F, Jansen J, Wetzels J, van der Vlag J, Smeets B. Glomerular Outgrowth as an Ex Vivo Assay to Analyze Pathways Involved in Parietal Epithelial Cell Activation. *J Vis Exp.* 2020 Aug 19;(162).
25. Veissi S, Smeets B, van den Heuvel LP, Schreuder MF, Jansen J. Nephrotic syndrome in a dish: recent developments in modeling in vitro. *Pediatr Nephrol.* 2020 Aug;35(8):1363-1372.
26. Miesen L, Eymael J, Sharma S, Loeven MA, Willemse B, Bakker-van Bebber M, Mooren F, Meyer-Schwesinger C, Dijkman H, Wetzels JFM, Jansen J, van der Vlag J, Smeets B. Inhibition of mTOR delayed but could not prevent experimental collapsing focal segmental glomerulosclerosis. *Sci Rep.* 2020 May 22;10(1):8580.
27. Smeets B, Miesen L, Shankland SJ. CD9 Is a Novel Target in Glomerular Diseases Typified by Parietal Epithelial Cell Activation. *Am J Kidney Dis.* 2020 May;75(5):812-814.
28. Frahsek M, Schulte K, Chia-Gil A, Djedjaj S, Schueler H, Leuchtle K, Smeets B, Dijkman H, Floege J, Moeller MJ. Cre recombinase toxicity in podocytes: a novel genetic model for FSGS in adolescent mice. *Am J Physiol Renal Physiol.* 2019 Nov 1;317(5):F1375-F1382.
29. Cheung KWK, van Groen BD, Spaans E, van Borselen MD, de Brujin ACJM, Simons-Oosterhuis Y, Tibboel D, Samsom JN, Verdijk RM, Smeets B, Zhang L, Huang SM, Giacomini KM, de Wildt SN. A Comprehensive Analysis of Ontogeny of Renal Drug Transporters: mRNA Analyses, Quantitative Proteomics, and Localization. *Clin Pharmacol Ther.* 2019 Nov;106(5):1083-1092.

30. Hermsen M, de Bel T, den Boer M, Steenbergen EJ, Kers J, Florquin S, Roelofs JJTH, Stegall MD, Alexander MP, Smith BH, Smeets B, Hilbrands LB, van der Laak JAWM. Deep Learning-Based Histopathologic Assessment of Kidney Tissue. *J Am Soc Nephrol*. 2019 Oct;30(10):1968-1979.
31. Kuppe C, Leuchtle K, Wagner A, Kabgani N, Saritas T, Puelles VG, Smeets B, Hakroush S, van der Vlag J, Boor P, Schiffer M, Gröne HJ, Fogo A, Floege J, Moeller MJ. Novel parietal epithelial cell subpopulations contribute to focal segmental glomerulosclerosis and glomerular tip lesions. *Kidney Int*. 2019 Jul;96(1):80-93.
32. Kurstjens S, Smeets B, Overmars-Bos C, Dijkman HB, den Braanker DJW, de Bel T, Bindels RJM, Tack CJJ, Hoenderop JGJ, de Baaij JHF. Renal phospholipidosis and impaired magnesium handling in high-fat-diet-fed mice. *FASEB J*. 2019 Jun;33(6):7192-7201.
33. Eymael J, Sharma S, Loeven MA, Wetzels JF, Mooren F, Florquin S, Deegens JK, Willemse BK, Sharma V, van Kuppevelt TH, Bakker MA, Ostendorf T, Moeller MJ, Dijkman HB, Smeets B, van der Vlag J. CD44 is required for the pathogenesis of experimental crescentic glomerulonephritis and collapsing focal segmental glomerulosclerosis. *Kidney Int*. 2018 Mar;93(3):626-642.