

SUPP TABLE 1 Histopathological definition of diabetic nephropathy (DN) and common non-diabetic renal aetiologies

Renal Diagnoses	Histopathological definition	Additional clinical information
Acute tubular necrosis	Diffuse tubular acute tubular necrosis in non-atrophic tubules with epithelial simplification, loss of brush border and focal cytoplasmic shedding	
Diabetic nephropathy (DN)	<p>In biopsies without nodules, electron micrographs demonstrating glomerular basement membrane >500nm thickness [13].</p> <p>Grades 1 and 2 (early DN): thickened GBM and the presence of diffuse mesangial expansion.</p> <p>Grades 3 and 4 (advanced DN): Kimmelstiel-Wilson nodules and >50% glomeruli sclerosed.</p> <p>Diffuse mesangial expansion without GBM thickening was considered as non-diabetic renal disease.</p>	
Focal segmental glomerulosclerosis (FSGS)	<p>Segmental lesion with closure of capillaries by fibrosis, hyalin, and/or foam cells, and capsular adhesion. Excludes glomeruli that were almost totally sclerosed, with <20% capillary loop patency, and/or >75% of the glomerulus adherent to Bowman's capsule.</p> <p>Immunofluorescence and EM characterized FSGS secondary to other primary glomerular disease.</p> <p>Glomerular diameter was measured from the 2 largest glomeruli, and the arithmetic mean was used. Obesity-related FSGS: patients with BMI >30 kg/m², with glomerular diameter > 2 SD above the mean of a renal biopsy control.</p> <p>Diagnosis of Mixed disease with DN and FSGS if both sets of features were present in same biopsy.</p>	
Glomerulonephritides (GN)	<p>Type defined by focal or diffuse involvement noted on light microscopy.</p> <p>Type of immune-complex GN defined by the presence of immune complex deposits and the location of electron dense deposits in relation to GBM, along with mesangial and GBM changes.</p> <p>Membranous GN: subepithelial deposits with IgG, variable C3 and positive granular capillary wall PLA₂R staining on microscopy. Extensive foot process effacement was noted on electron microscopy.</p>	<p>Proteinuria and/or presence of active urine sediment.</p> <p>Systemic diseases defined by positive serological markers: Antinuclear, anti-cytoplasmic or ds-DNA antibodies, Hepatitis B surface antigen, Hepatitis C antibodies, or low complement (C3, C4, or both)</p>
Interstitial nephritis	Interstitial oedema between non-atrophic tubules with inflammatory infiltrate of eosinophils and/or neutrophils, and/or the presence of tubular cell injury, regeneration or inflammatory cell infiltration.	
Minimal change disease	Thin GBM with mesangial cellularity and matrix within normal limits. Normal GBM thickness without deposits, and diffuse foot process effacement on EM.	

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GBM - glomerular basement membrane; EM - electron microscopy

SUPPL TABLE 2 Glomerular capillary patency and interstitial scarring in DN, NDRD and Mixed groups

	DN (n=94)	Mixed (N=97)	NDRD (N=72)
Histopathology			
DN grade (median, IQR)	3 [3, 4]	3 [3, 3] ^c	N/A
Sclerosed glomeruli (%)	50 (30 – 64)	30 (17 – 48) ^c	20 (7 – 33) ^{a,b}
Glomerular capillary patency (%)	30 (20 – 60)	60 (33 – 75) ^c	95 (84 – 95) ^{a,b}
Interstitial scarring (%)	44 (22 – 63)	20 (10 – 35) ^c	15 (5 – 25) ^{a,b}
Outcomes			
Renal (ESRD or RRT)	50 (53%)	66 (68%)	17 (24%) ^{a,b}
Death	25 (27%)	17 (17.5%)	19 (26%)

^ap<0.05 comparing DN alone and NDRD; ^bp<0.05 comparing NDRD and mixed;

^cp<0.05 comparing DN and mixed

DN: Diabetic nephropathy; ESRD: End-stage renal disease; NDRD: Non-diabetic renal disease; RRT: Renal replacement therapy