

RENAL BIOPSY REQUEST FORM		
ABBREVIATIONS		
by Dr Candice Roufosse, Consultant Renal Pathologist Imperial College, Faculty of Medicine, Dept of Immunology and Inflammation, Centre for Inflammatory Disease. London		
ABBREVIATION	SIGNIFICANCE	COMMENT (N.B. normal ranges are indicative; refer to local lab reference levels)
General abbreviations		
N	Normal	
Bx	Biopsy	
Tx	Transplant	
Txp	Transplant	
Blood and urine results		
S	often stands for serum	
C	Serum creatinine	C also used for complement, as in C3 or C4
Cr	Serum creatinine	
sC	Serum creatinine	
Creat	Serum creatinine	NORMAL RANGE: adult F up to ~100 µmol/L; adult M up to ~ 120 µmol/L
GFR	Glomerular filtration rate	short cut for eGFR
eGFR	estimated glomerular filtration rate	NORMAL RANGE: > 60 mL/min/1.73 m2
UP	urinary protein	
uPCR	urinary protein to creatinine ratio	Significant proteinuria >50mg/mmol
PCR	urinary protein to creatinine ratio	
uACR	urinary albumin to creatinine ratio	Significant proteinuria >30 mg/mmol
ACR	urinary albumin to creatinine ratio	
dip	dipstick results	for protein and blood e.g. prot ++ blood +
A	Serum albumin	
Alb	Serum albumin	NORMAL RANGE ~ 35-55 g/L
sAlb	Serum albumin	
C3	complement component 3	
C4	complement component 4	
CH50	total haemolytic complement	
Chol	cholesterol	levels depend on cholesterol tested (Total, HDL,LDL)
antiPLA2R	antiphospholipase type 2 receptor antibodies	
PLA2R	phospholipase type 2 receptor	short-cut for anti-PLA2R
dsDNA	antibodies against double stranded DNA	
ANA	anti-nuclear antibodies	
APL	anti-phospholipid antibodies	
cryo	cryoglobulin	
ANCA	anti-neutrophil cytoplasm antibody	
MPO	myeloperoxidase	subtype of ANCA
PR3	proteinase 3	subtype of ANCA
Hb	haemoglobin	
PLT	platelets	
WBC	white blood cells	
Eo	eosinophils	
ACE	angiotensin converting enzyme	elevated in sarcoidosis
RF	rheumatoid factor	present in rheumatoid arthritis and other autoimmune diseases
HbA1c	glycated haemoglobin	target value in diabetes <48 mmol/mol
Types of biopsy		
Native	Biopsy of native kidney	
Transplant	Biopsy of transplant kidney	
Preimplantation	biopsy taken just before implanting the donated organ	
Implantation	biopsy taken at or just after implantation of the donated organ	
Time zero	biopsy taken at or just after implantation of the donated organ	
Indication	biopsy taken for dysfunction of the graft	most often increase in creatinine or proteinuria
Surveillance	biopsy taken from a graft with stable function	in order to detect subclinical events

Clinical history		
FH	Family history	
PUO	Pyrexia of unknown origin	
ARF	acute renal failure (same as AKI)	rapid increase in creatinine
AKI	acute kidney injury (same as ARF)	rapid increase in creatinine
CRF	chronic renal failure (same as CKD)	progressive increase in creatinine
CKD	chronic kidney disease (same as CRF)	progressive increase in creatinine
ESRF	end stage renal failure	
No	nephrotic (syndrome)	haevy proteinuria with low serum albumin and oedema
microhaem	microhaematuria	blood in the urine without visible urine discoloration
µhaem	microhaematuria	
macrohaem	macrohaematuria	visible blood in urine
Systemic conditions affecting the kidney		
MM	multiple myeloma	
ANCA	antineutrophil cytoplasmic antibody	
WG	Wegener's granulomatosis	also known as granulomatous polyangeitis
GPA	granulomatous polyangeitis	also known as Wegener's granulomatosis
CS	Churg Strauss syndrome	also known as eosinophilic polyangeitis
EPA	eosinophilic polyangeitis	also known as Churg Strauss syndrome
MPA	microscopic polyangeitis	
DM	diabetes mellitus	
T1DM and T2DM	type 1 and type 2 diabetes mellitus	
DM 1 and DM 2	type 1 and type 2 diabetes mellitus	
type 1 and type 2 DM	type 1 and type 2 diabetes mellitus	
HTN	hypertension	
HT	hypertension	
SLE	systemic lupus erythematosus	
LN	lupus nephritis	LN class I-VI
Tb	tuberculosis	
RA	rheumatoid arthritis	
AAA	abdominal aortic aneurysm	
IHD	ischaemic heart disease	
TIA	transient ischaemic attack (brain)	
UTI	urinary tract infection	
LRTI	lower respiratory tract infection	
HBV	hepatitis B virus	
	hepatitis C virus	
Native Biopsy Terminology - biopsy findings		
ATI	acute tubular injury	
IgA	IgA nephropathy	
FSGS	focal and segmental glomerulosclerosis	
GN	glomerulonephritis	
MPGN	membranoproliferative glomerulonephritis	same as mesangiocapillary glomerulonephritis; type I-III
MCGN	mesangiocapillary glomerulonephritis	same as membranoproliferative glomerulonephritis; type I-III
TIN	tubulointerstitial nephritis	
C3 GN	C3 glomerulonephritis	
LN	lupus nephritis	
Mb	membranous glomerulopathy	
Min ch	minimal change disease	
TBM	thin basement membrane disease	
MIDD	monoclonal immunoglobulin deposition disease	
LCDD	light chain deposition disease	
Renal replacement therapy (treatment for ESRF received before transplantation)		
HD	haemodialysis	
PD	peritoneal dialysis	
CAPD	continuous ambulatory peritoneal dialysis	
Transplant related terminology - clinical		
Tx	transplant(ation)	
Cad Tx	cadaveric (deceased donor) transplant	same as DD
DD	Deceased donor	same as Cad Tx
DCD	Donor-after cardiac death / non heart beating (subtype of DD)	same as NHB
DBD	Donor-after brain death / heart-beating (subtype of DD)	
ECD	Extended criteria donor	refers donors > 60 or >50 with risk factors for renal disease
NHB	Donor-after cardiac death / non heart beating (subtype of DD)	same as DCD
LD	Live donor/living donation	
LRT/ LRTx	Live related transplant (subtype of LD)	

LURT/ LURTx	Live unrelated transplant (subtype of LD)	
SPK	Simultaneous pancreas and kidney transplant	
RTA	road traffic accident	
ICH	intracranial haemorrhage	
DSA	donor specific antibody	antibody in the recipient against the donor (usually anti-HLA or anti-blood type)
HLA	human leukocyte antigen	most common donor antigens to elicit the development of donor specific antibodies against the graft
MM	mismatch	mismatch in HLA loci A,B and DR; min of 0, max of 2 mismatches per locus; total MM 0 to 6 (where 0 is best and 6 is worst); e.g. 1:1:0 signifies 1 mismatch in A, 1 mismatch in B and 0 mismatches in DR
ABOi	blood group ABO incompatible transplant	donor and recipient are of different blood groups
+XM	positive cross match	recipient has antibodies to donor HLA antigens detected using complement dependent cytotoxicity cross match
+FC	positive flow cytometry	recipient has antibodies to donor HLA antigens detected using flow cytometry
DSA	donor specific antibody	recipient has antibodies to donor HLA antigens
Luminex	bead technology for detecting HLA antibodies in the serum	
DGF	delayed graft function	graft not functioning in days/weeks following transplantation
NODAT	new onset diabetes after transplantation	
CMV	cytomegalovirus	
Transplant related terminology - biopsy findings		
CMR	cell-mediated rejection (same as TCMR)	
TCMR	cell-mediated rejection (same as CMR)	
AMR	antibody-mediated rejection (same as ABMR)	
ABMR	antibody-mediated rejection (same as AMR)	
IFTA	interstitial fibrosis/tubular atrophy	
BK	BK virus infection	
t	tubulitis	Banff code for tubulitis
Banff	Banff scoring system for transplant pathology findings	includes t (tubulitis), I (interstitial inflammation), v (vasculitis), g (glomerulitis), ptc (peritubular capillaritis), ct (tubular atrophy), ci (interstitial fibrosis), cg (transplant glomerulopathy), cv (arterial intimal thickening), ah (arteriolar hyalinosis)
Drugs		
CNI	calcineurin inhibitor	
FK(506)	tacrolimus	
Tac	tacrolimus	
MMF	mycophenolate mofetil	
Aza	azathioprine	
CyA	cyclosporine	
CS	cyclosporine	
cyclo	cyclosporine	
Pex	plasma exchange	
IVIG	intravenous immunoglobulin	
P	prednisolone	
Pred	prednisolone	
MP	methylprednisolone	
mono	monotherapy	
antiCD20	monoclonal anti-CD20 antibody	
Ritux	rituximab (antiCD20)	
ARVT	anti-retroviral therapy	
NSAIDS	non steroidal anti-inflammatory drugs	
antiCD52	anti-CD52 antibodies	e.g. campath, alemtuzumab
anti-IL2	anti-interleukin 2 receptor antibodies	e.g. daclizumab, basiliximab
ACEi	angiotensin converting enzyme inhibitor	e.g. captopril, enalapril, lisinopril, ramipril, ...
ARB	angiotensin receptor blockade	e.g. candesartan, irbesartan, losartan, ...
PPI	proton pump inhibitors	e.g. omeprazole, lansoprazole, ...
Radiological investigations and findings		
TRAS	transplant renal artery stenosis	restricts blood flow to transplant resulting in dysfunction
RAS	same as TRAS	
IADSA	intra-arterial digital subtraction angiography	used to investigate for TRAS
DES	drug eluting stent	used to treat TRAS
USS	ultrasound scan	
Miscellaneous		
PUO	pyrexia of unknown origin	
RCC	renal cell carcinoma	
LUTS	lower urinary tract symptoms	
ca	carcinoma	

AVF	arteriovenous fistula	complication of renal biopsy procedure; risk of subsequent haemorrhage
LN	lymph node	
PTLD	post-transplant lymphoproliferative disorder	
+ve	positive	
-ve	negative	