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Molecular and genetic markers for the prediction of kidney transplant outcome

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CURRICULUM VITAE

Jianxin Yang was born on September 1st 1985 in Zhangjiakou, Hebei, China. In 2006, he started his animal and plant quarantine studies at the Hebei North University. He obtained his bachelor degree in 2010 with a graduation research project on parasite identification at the pathology laboratory from the Animal science and Technology College. He then started his studies on preventive veterinary at Jilin University (JLU). He studied the effect of Raf kinase inhibitor protein (RKIP) on the replication and propagation of Newcastle Disease Virus and completed his master degree in 2013 at the department of veterinary virology of JLU. In November 2013, he started the Ph.D. studies described in this thesis at the department of Immunohaematology and Blood Transfusion (IHB) of the Leiden University Medical Center (LUMC) under the supervision of prof. dr. F.H.J. Claas, and dr. M. Eikmans. During his Ph.D. research he studied molecular and genetic risk factors of kidney transplant outcome. In August 2018, he went back to China and will continue his research in the field of kidney transplantation.

Abbreviations

ABMR	antibody mediated rejection
AP-1	activator protein 1
APAF1	apoptotic protease-activating factor-1
APC	antigen presenting cells
ATG	anti-thymocyte globulin
ATP	adenosine triphosphate
BAX	BCL2-associated X protein
BCL2	B-cell lymphoma 2
BH3	Bcl-2 homology domain 3
c-FLIP	cellular FLICE (FADD-like IL-1 β -converting enzyme)-inhibitory protein
CAN	chronic allograft nephropathy
Caspases	cysteine-dependent aspartate-directed proteases
CCL2	chemokine (C-C motif) ligand 2
CTLA4	cytotoxic T-lymphocyte-associated protein 4
DAMP	damage-associated molecular patterns
DC	dendritic cells
DGF	delayed graft function
Disc	death inducing signaling complex
DSA	donor specific antibody
dsRNA	double-stranded RNA
ESRD	end-stage renal disease
FasL	First apoptosis signal receptor ligand
GWAS	genome wide association study
HLA	human leukocyte antigen
HMGB1	high-mobility group box-1
HSP	heat shock proteins
IF/TA	interstitial fibrosis and tubular atrophy
IFN- γ	interferon gamma
IL	Interleukin
IRAK	IL-1R-associated kinase
IRI	ischemia and reperfusion injury
IVIG	intravenous immunoglobulin
LAG-3	Lymphocyte Activating 3
LPS	lipopolysaccharide
MAC	membrane-attack complex
MAPK	mitogen-activated protein kinase
MBL	mannan-binding lectin
MDSC	myeloid-derived suppressor cell



MHC	major histocompatibility complex
MYD88	myeloid differentiation primary response protein 88
NF-kB	nuclear factor kappa-light-chain-enhancer of activated B cells
NK	natural killer
NLR	nucleotide-binding oligomerization domain-like receptors
PAMP	pathogen-associated molecular patterns
PD	programmed death
PGM5	Phosphoglucomutase 5
PRR	pattern recognition receptors
PTC	peritubular capillaries
RAGE	receptor for advanced glycation end products
RIG	retinoic acid-inducible gene I
RLR	RIG-like receptors
ROS	reactive oxygen species
SNP	single nucleotide polymorphisms
ssRNA	single-stranded RNA
TCMR	T cell mediated rejection
TGF- β	transforming growth factor beta
TLR	Toll-like receptor
TM4SF18	Transmembrane 4 L Six Family Member 18
TNF α	tumor necrosis factor alpha
TRAM	TRIF-related adaptor molecules
TRIF	TIR domain-containing adaptor protein inducing IFN β

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