

Value of Interleukin-7 and Interleukin-15 as Predictors of Post Allogeneic Bone Marrow Transplantation Complications

Thesis

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List of Abbreviation

µg/kg/hour	Micrograms/kilogram per hour.
µmol/L	micromol/liter.
6-MP	6-mercaptopurine.
8-MOP	8-methoxypsoralen.
AA	Aplastic anaemia.
ABL	Abelson.
ACTH	Adreno-corticotropic hormone.
aGVHD	Acute graft versus host disease.
AIDS	Acquired immunodeficiency syndrome.
AKF	Acute kidney failure.
AKI	Acute kidney injury.
ALL	Acute lymphoblastic leukaemia.
Allo-HSCT	Allogeneic hematopoietic stem cell transplantation.
Allo-SCT	Allogeneic stem-cell transplantation.
ALP	Alkaline phosphatase.
ALT	Alanine aminotransferase.
AML	Acute myeloid leukemia.
ANC	Absolute neutrophil count.
ANOVA	Analysis of variance
Anti-HBc	anti-Hepatitis B core.
Anti-HBs	anti-Hepatitis B surface
AP-1	Activator protein-1.
APACHE	Acute Physiology and Chronic Health Evaluation.
APC	Antigen presenting cells.
APL	Acute promyelocytic leukemia.

List of Abbreviation (Cont.)

Ara-C	.....	Cytosine arabinoside.
ASCT	.....	Autologous stem-cell transplantation.
AST	.....	Aspartate aminotransferase.
ATG	.....	Antithymocyte globulin.
ATP	.....	Adenosine triphosphate.
ATRA	.....	All trans-retinoic acid.
AZA	.....	Azathioprine.
BAD	.....	BCL-2 associated death promoter
BAL	.....	Biphenotypic acute leukemia.
BAX	.....	BCL-2 associated X protein
BCL-2	.....	B-cell lymphoma 2
BCR-ABL	.....	Breakpoint cluster region-abelson.
BLL	.....	Acute bilineal leukemia.
BM	.....	Bone marrow.
BMD	.....	Bone mineral density.
BMT	.....	Bone marrow transplantation.
BO	.....	Bronchiolitis obliterans.
BOOP	.....	Bronchiolitis obliterans–organizing pneumonia.
BOS	.....	Bronchiolitic obliterans syndrome.
BSA	.....	Body surface area.
Bu	.....	Busulfan.
BUN	.....	Blood urea nitrogen.
Ca²⁺		Calcium.
CBF	.....	Core binding factor.
CD	.....	Cluster of differentiation.

List of Abbreviation (Cont.)

CDC	Centers for Disease Control and Prevention.
cGVHD	Chronic graft versus host disease.
cGy	Centigray.
CHOP	Cyclophosphamide, doxorubicin, vincristine and prednisone.
CIBMTR	Center for International Blood and Marrow Transplant Research.
CIMF	Chronic idiopathic myelofibrosis.
CKD	Chronic kidney disease.
CLL	Chronic lymphocytic leukemia.
cm	Centimeters.
CML	Chronic myeloid leukemia.
CMV IgG	Cytomegalovirus immunoglobulin G.
CMV IgM	Cytomegalovirus immunoglobulin M.
CMV	Cytomegalovirus.
CMV-IP	Cytomegalovirus -associated interstitial pneumonia.
CNI	Calcineurin inhibitors.
CNS	Central nervous system.
COP	Cryptogenic organizing pneumonia.
CR	Complete remission.
CR2	Second complete remission.
CT	Computed tomography.
CTCAE	Common Terminology Criteria for Adverse Events.
CTL	Cytotoxic T lymphocytes.
CVC's	Central venous catheters.

List of Abbreviation (Cont.)

CVP	Cyclophosphamide, prednisolone.	vincristine,
CXCL-12	Chemokine ligand 12.	
CXCR4	Chemokine receptor 4.	
Cy	Cyclophosphamide.	
del	Deletion.	
DFS	Disease free survival.	
DHFR	Dihydrofolate reductase.	
DIC	Disseminated intravascular coagulopathy.	
DLBL	Diffuse large B-cell lymphoma.	
DLI	Donor lymphocyte infusions.	
DM	Diabetes mellitus.	
DMSO	Dimethyl sulphoxide.	
DNA	Deoxyribonucleic acid.	
EBMT	European Group For Blood And Marrow Transplantation.	
EBV	Epstein Barr virus	
EBVlgG	Epstein Barr virus immunoglobulin G	
EBVlgM	Epstein Barr virus immunoglobulin M	
ECP	Extracorporeal photochemotherapy.	
EDTA	Ethylene-diamineteraacetic acid.	
eGFR	Estimated glomerular filtration rate.	
EGIL	European Group for the Immunological classification of Leukemias.	
ELISA	Enzyme linked immunosorbent assay.	
EORTC	European Organization for Research and Treatment of Cancer.	
FasL	Fas ligand.	

List of Abbreviation (Cont.)

FDA	Food and Drug Administration.
FEV1	Forced expiratory volume in 1st second.
FISH	Fluorescence in situ hybridization.
FKBP12	FK506-binding protein.
FLT3	Fms-like tyrosine kinase 3.
FVC	Forced vital capacity.
G-CSF	Granulocyte colony-stimulating factor.
GCV	Ganciclovir.
GFR	Glomerular filtration rate.
GH	Growth Hormone.
GI	Gastrointestinal.
GIT	Gastrointestinal tract.
GSH	Glutathione.
GST	Glutathione S-transferases.
GVHD	Graft versus host disease.
GVL	Graft-versus-leukemia.
GVT	Graft versus tumour.
Gy	Gray.
HB e Ab	Hepatitis B e antibody.
HB e Ag	Hepatitis B e antigen.
HB s Ab	Hepatitis B surface antibody.
HBcIgG	Hepatitis B core antibody immunoglobulin G
HBcIgM	Hepatitis B core antibody immunoglobulin M.
HBsAg	Hepatitis B surface antigen.
HBV	Hepatitis B virus.

List of Abbreviation (Cont.)

HC	Hemorrhagic cystitis.
HCV	Hepatitis C virus.
HDL	High density lipoproteins.
HIT	Heparin induced thrombocytopenia.
HIV	Human immunodeficiency virus.
HL	Hodgkin's lymphoma.
HLA	Human leucocyte antigens.
HSC's	Hematopoietic stem cells.
HSCT	Haematopoietic stem cell transplantation.
HSV IgG	Herpes simplex immunoglobulin G.
HSV IgM	Herpes simplex immunoglobulin M.
HSV	Herpes simplex virus.
HTN	Hypertension.
HVOD	Hepatic veno-occlusive disease.
IA	Invasive aspergillosis.
IBMTR	International Bone Marrow Transplant Registry
IFI	Invasive fungal infection.
IFN-γ	Interferon gamma.
IgG VH	immunoglobulin heavy chain gene.
IgG	Immunoglobulin G.
IL	Interleukin.
IL-15 R	Interleukin-15 receptor
IL-15	Interleukin-15
IL-15Rβ	Interleukin 15 receptor beta.
IL-2/IL-15 R	Interleukin-2/Interleukin-15 receptor
IL-7 R	Interleukin-7 receptor

List of Abbreviation (Cont.)

IL-7	.....	Interleukin-7
INR	.....	International normalization ratio.
int-1	.....	intermediate 1.
int-2	.....	intermediate 2.
Inv	.....	Inversion.
IPS	.....	Idiopathic pneumonia syndrome.
IPSS	.....	International prognostic scoring system.
IRIS	.....	International Randomized Study of Interferon and STI571.
IST	.....	Immunosuppressive therapy.
ITD	.....	Internal tandem duplication.
IV	.....	Intravenous.
IVIg	.....	Intravenous immunoglobulins.
JAK-1	.....	Janus kinase-1
JAK-3	.....	Janus kinase-3
Kb	.....	kilobases
KDa	.....	Kilodaltons
L	.....	Liter.
LD TBI	.....	Low dose total body irradiation.
LDH	.....	Lactate dehydrogenase.
LDL	.....	Low density lipoproteins.
LFT	.....	Liver function tests.
LMWH	.....	Low molecular weight heparin.
LPS	.....	Lipopolysaccharide.
mAbs	.....	Monoclonal antibodies.
M-CD3	.....	Muromonab-CD3.
MCL	.....	Mantle-cell lymphoma.

List of Abbreviation (Cont.)

MDR	Multidrug-resistant.
MDS	Myelodysplastic syndrome.
mg/dL	milligrams/deciliter.
mg/kg	Milligrams per kilograms.
mg/m²	Milligrams per meter square.
MHC	Major histocompatibility complex.
MiHAs	Minor histocompatibility antigens.
MLL	Mixed lineage leukemia.
MM	Multiple myeloma.
mm³	Cubic millimeter.
MMF	Mycophenolate mofetil.
mmHg	Millimeter mercury.
MPAL	Mixed phenotype acute leukemia.
MRD	Minimal residual disease.
MRI	Magnetic resonance imaging.
mRNA	Messenger ribonucleic acid.
MSD	Matched sibling donor.
MSG-NIAID	Mycoses Study Group of the National Institute of Allergy and Infectious Diseases.
mTOR	Mammalian Target of Rapamycin.
MTX	Methotrexate.
MUD	Matched unrelated donor.
M-W	Mann Whitney test
NCI	National Cancer Institute.
NFAT	Nuclear factor of T cells.
NHL	Non- Hodgkin's lymphoma.

List of Abbreviation (Cont.)

NK	Natural killer.
NOS	Not otherwise specified.
NRM	Non-relapse related mortality.
OS	Overall survival.
p	Short arm of the chromosome.
PB	Peripheral blood.
PBSC	Peripheral blood stem cells.
PBSCT	Peripheral blood stem cell transplantation.
PCR	Polymerase chain reaction.
PDGF	Platelet-derived growth factor.
Pg/ml	Picogram per milliliter
Ph-	Philadelphia negative.
Ph+	Philadelphia positive.
PT	Prothromin time.
PTLD	Post-transplant lymphoproliferative disease.
PTT	Partial thromboplastin time.
PUVA	8-MOP and UVA.
q	Long arm of the chromosome.
RAEB II	Refractory anemia with excess blasts type 2.
Rh	Rhesus factor
rhG-CSF	Recombinant human granulocyte colony-stimulating factor.
rhGM-CSF	Recombinant human granulocyte macrophage colony-stimulating factor.
RIC	Reduced-intensity conditioning.
RNA	Ribonucleic acid.