WMDA Donor Medical Suitability Recommendations Main page

Disclaimer

These guidelines exist as an aid to organisations in assessing the medical suitability of their potential donors. Please be reminded that these guidelines are not intended to supersede local laws or requirements of national legislative bodies.

About the WMDA donor medical suitability guidelines

Guidance provided by the World Marrow Donor Association (WMDA) aims to provide minimum standards by which potential donors should be assessed. The WMDA guidance reflects the consensus opinion of the WMDA donor medical suitability committee. The purpose of this guidance is to provide globally harmonised medical assessment criteria which simultaneously protect the interest of donors whilst ensuring the safety of cellular products across international boundaries.

Whilst this WMDA guidance is not specifically intended for related donors, those involved with the medical assessment of related donors should consider these recommendations.

How donor medical suitability is assessed

Two key concepts govern the assessment of donor health, namely restrictive criteria for donor risk and more permissive criteria for recipient risk

Donor risk

- Donation of hematopoietic stem cells (HSC) is an act of altruism, and may be to a recipient in a different country, with quite different moral, cultural and religious values.
- Whilst it is recognised that the process of donation carries a small but unavoidable risk of harm to the donor, it is both the moral and legal responsibility of donor registries and donor centres to minimise any avoidable risk. This includes medical conditions that may increase the risk of harm to the donor before, during, and after the collection of HSC.
- For this reason, medical criteria governing conditions that may increase donor risk are necessarily stringent, and certainly more so than would be the case if the individual were undergoing a procedure for therapeutic benefit.
- In many cases it is difficult to establish a rigorous evidence base as justification for the criteria. In such cases, expert opinion of the underlying physiology of disease will be sought, and combined with knowledge of the known physiological changes associated with donation, as well as experience gained through several decades of HSC donor follow-up and adverse event reporting.
- In general, if there is any doubt about the safety of the donor in the presence of a particular medical condition, it will be recommended that any donor with that condition be prevented from donating.

Recipient risk

- By contrast, our recommendations regarding conditions that may put the recipient at risk are more lenient.
- For many patients, an unrelated donor HSC transplant represents the only possibility of disease cure or long-term remission. Because of the diverse nature of HLA tissue-types, many patients will have a limited number of potentially matched donors. In such cases, donor medical conditions that may present a risk to the recipient alone should be reported to the transplant centre, who are best placed to make an informed risk-benefit judgement on whether to proceed with that particular donor.
- There are obvious exceptions to this, however, in particular the carriage of transmissible agents which may have more deleterious effects in the recipient. These include infectious agents such as HIV, viral hepatitis and HTLV, prion-related diseases such as Creutzfeld-Jakob Disease, and carriage of auto-reactive lymphocytes causing multi-system or severe single-organ autoimmune diseases, such as systemic lupus erythematosus, multiple sclerosis or inflammatory bowel disease.

Contents

Procedure for creating and reviewing the donor medical suitability guidelines

To create and support this resource, the WMDA has established the donor medical suitability committee. Members of the committee represent all major regions in the world, and are themselves overseen by numerous competent authorities within their country of practice. Committee members are actively involved in donor centre and/or registry operations with experience in matters concerning unrelated donor medical suitability. You can find the members here: https://share.wmda.info/x/So1JAQ.

Submitting a request for review

WMDA welcomes requests for review of individual medical conditions from all those with responsibility for HSC donors, related or unrelated. This may be a medical condition not covered by the current guidance, or a request for clarification or review of current guidance. Requests for new guidance, and feedback on existing guidance, are submitted to the donor medical suitability committee. Comments and justifications for the committee decision are documented, including justification for the decision. Regardless of the outcome, a formal response to the query is provided to the author of each submission in order to inform the registry/donor centre of the outcome of the discussion. Recommendations that are approved are posted to this website. Any controversies pertaining to the recommendations are added to the discussion section on the relevant page. You can click on the button on the right top corner of the page.

Add your question or recommendation at the question section or send an email to mail@wmda.info.

WMDA Recommendations for assessing donor medical suitability

Recommended minimum donor medical and lifestyle information requested at recruitment

Medical history	Examples of relevant conditions
Cancer	
Autoimmune disease	
Infectious diseases, including being a sexual partner of an infected individual	HIV, Hepatitis B, Hepatitis C, HTLV, syphilis
Infectious diseases, others	CJD (including familial risk), Chagas disease, tuberculosis, malaria
Inherited disease	Sickle cell disease, thalassemia, inherited bleeding disorder
Any other medical history	The potential donor should be asked if they have any other past or current medical problems
High risk sexual behaviour	As defined by the registry's national competent authority. However, registries should be aware that sexual practices may change with time and are not necessarily criteria for exclusion.
Non-prescription parenteral drug use	
Current medications	
Height and weight	
Allergies	

Minimum donor medical and lifestyle information requested at confirmatory/verification typing stage

Medical history	Examples of relevant conditions or questions
Cancer	
Autoimmune disease	Ankylosing spondylitis; Crohn's disease; ulcerative colitis; myasthenia gravis; rheumatoid arthritis; sarcoidosis; SLE; multiple sclerosis; scleroderma/CREST. Any other autoimmune condition
Infectious diseases, including being a sexual partner of an infected individual	HIV, Hepatitis B, Hepatitis C, HTLV, syphilis
Infectious diseases, others	CJD (including familial and exposure risk, e.g. neurosurgery, use of pituitary hormone), Chagas disease, tuberculosis, malaria
Back problems	Any acute or chronic back complaint, including cause, investigations, duration, medication and impact on activities of daily living
Hypertension	Most recent blood pressure readings; medications; degree of control
Cardiac disease	Coronary artery disease; evidence of valve disease, e.g. murmur; arrhythmia
Asthma	Degree of control; medications; use of oral steroids; hospital admissions; intensive care admissions/ventilation
Epilepsy	Medications; date of last seizure
Pregnancy	Number of pregnancies, including miscarriage; current/recent pregnancies; breastfeeding.
Blood transfusion	Receipt of a blood transfusion. Ask year and place of transfusion.
Any other medical history	The potential donor should be asked if they have any other past or current medical problems
Height and weight	
High risk sexual behaviour	As defined by the registry's national competent authority
Non-prescription parenteral drug use	
Alcohol consumption	
Tattoo, acupuncture or body piercing	When and where. Establish if at an establishment registered according to national regulations
Current medications	
Allergies	

Recommended minimum medical assessment at work-up

Medical history as table 2, plus:	
Travel history	Identify travel to areas with endemic malaria, chagas and West Nile virus
Sexual history	Identification of high risk sexual behaviour, including within groups associated with a higher prevalence of blood borne viruses
Examination	General (including height and weight); cardiovascular (including blood pressure); respiratory; gastrointestinal; neurological
Laboratory investigations (see table 4 for infectious disease markers)	
Haematology	Full blood count; coagulation screen (including PT, APTT and fibrinogen); ESR; blood film; haemoglobin electrophoresis or high-pressure liquid chromatography
Biochemistry	Urea and electrolytes; liver function tests; LDH; ferritin; random glucose; b-HCG (for females of child-bearing age)
Other investigations	Chest x-ray; electrocardiogram

Recommended minimum testing for infectious disease markers

Stage	**Infectious disease**	**Recommended validated assay**
Recruitment	Nil	Nil
CT-stage	HIV	HIV antibody
	Hepatitis B	Hepatitis B surface antigen
	Hepatitis C	Hepatitis C antibody
Work-up	HIV	HIV 1,2 antibody
		p24 antigen
		HIV RNA
	Hepatitis B	Hepatitis B surface antigen
		Hepatitis B surface antibody
		Hepatitis B core antibody
		Hepatitis B DNA
	Hepatitis C	Hepatitis C antibody
		Hepatitis C RNA
	HTLV I+II	HTLV I+II antibody
	Syphilis	Validated serological testing algorithm

Schedule for repeating donor assessments in the event of a delay to collection and in case of subsequent donation

Time from work-up medical assessment to collection	Repeat assessments required
<=30 days	None
>30 days, <90 days	Required: • Infectious disease markers • Risk assessment[1] for transmittable disease • Full donor history if subsequent donation Optional[2]: • Full donor history if first donation • Physical examination • All laboratory testing excluding hemoglobinopathy screening Additional testing
>=90 days, <6months	Required: • Infectious disease markers • Risk assessment for transmittable disease • Full donor history if subsequent donation • All laboratory testing excluding hemoglobinopathy screening Optional: • Full donor history if first donation • Physical examination Additional testing
>=6 months	Required: • Infectious disease markers • Full donor history including risk assessment for transmittable disease • Physical examination • All laboratory testing excluding hemoglobinopathy screening Recommended • ECG Optional (per discretion of physician in charge): Additional testing such as Chest X-ray or abdominal ultrasound.

[1]Risk assessment does not necessary mean a full risk questionnaire, but means a risk assessment based on local policies, endemic risks and previous individual risk assessments and /or Infectious disease marker results. Especially in young donors a travel history seems appropriate.

[2]Optional: per discretion of the donor physician in charge or as required by standards or (national) legislation.

Recommended intervals between HPC donations and other blood(product) donations

A WMDA working group is currently reviewing an article that was written on the subject of subsequent donations. Read more on the project and find the article on this page in Share.

WB to HPC interval	If a donor reports donating WB within the last 3 months, report to collection centre physician
Plasmapheresis or plateletphereris to HPC interval	2 weeks
HPC(A) to WB interval	Advise donor to wait 3 months (i.e. equivalent to one WB => WB interval)
HPC(M) to WB interval	Advise donor to wait 6 months (i.e. equivalent to one WB => WB interval)
HPC(A) to plasmapheresis interval	Advise donor to wait 2 weeks (i.e. a typical plasmapheresis => plasmapheresis interval)
HPC(M) to plasmapheresis interval	Advise donor to wait 4 weeks (i.e. a typical WB => plasmapheresis interval)
HPC(A) to plateletpheresis interval	Advise donor to wait 2 weeks (i.e. a typical plateletpheresis => plateletpheresis interval)
HPC(M) to plateletpheresis interval	Advise donor to wait 4 weeks (i.e. a typical WB => plateletpheresis interval)

Alphabetical index of individual medical guidelines

A

B

C

D

Dengue Fever

Depression

Diabetes mellitus

E

Ebola, see Viral haemorrhagic fever

Ebstein anomaly, see Valvular heart disease

EBV, see Epstein Barr Virus

Eczema

Endometriosis

Emphysema, see Chronic obstructive pulmonary disease

Endoscopy, see Surgery

Epilepsy

Episcleritis, see Inflammatory eye disease

Epstein Barr Virus

F

Factor II (prothrombin) mutation, see Thrombosis and Thrombophilia

Factor V Leiden, see Thrombosis and Thrombophilia

Fibromyalgia

First degree heart block, see Arrhythmia

G

Glaucoma

Glomerulonephritis, see Renal disease

Goodpasture syndrome, see Severe or systemic autoimmune disease

Graves disease, see Single organ autoimmune disease

Guillain-Barre syndrome, see Severe or systemic autoimmune disease

Gout

H

Haemoglobin disorder

Haemophilia (any type), see Bleeding disorders

Hashimoto thyroiditis, see Single organ autoimmune disease

Hayfever, see Allergy

HbC, HbD, HbE, HbO, see Haemoglobin disorder

Heart attack, see Coronary artery disease

Heart block, see Arrhythmia

Heart murmur, see Valvular heart disease

Hemochromatosis

Heparin therapy, see Bleeding disorders

Hepatitis B

Hepatitis C

Hepatitis E

Hereditary haemorrhagic telangiectasia, see Bleeding disorders

Herniated intervertebral disc, see Back complaints

Herpes simplex virus

High affinity haemoglobin, see Haemoglobin disorder

High blood pressure, see Hypertension

High risk sexual behaviour

HIV

Hormone replacement therapy, see Prion-associated disease

HSV, see Herpes Simplex Virus

HTLV infection

Hypertension

Hyperthyroidism, see Single organ autoimmune disease

Hypothyroidism, see Single organ autoimmune disease

I

IgA nephropathy, see Renal disease

Immune thrombocytopenia, see Bleeding disorders

Implantable cardiac defibrillator (ICD), see Arrhythmia

Inflammatory bowel disease, see Severe or systemic autoimmune disease

Inflammatory eye disease

Innocent murmur, see Valvular heart disease

Injection of non-prescription drugs

Innoculation injury

Iridocyclitis, see Inflammatory eye disease

Iritis, see Inflammatory eye disease

Ischaemic heart disease (IHD), see Coronary artery disease

J

Jugular vein thrombosis, see Thrombosis and Thrombophilia

K

Kidney stones, see Renal disease

L

Latex allergy, see Allergy

Left bundle branch block, see Arrhythmia

Long-QT syndrome, see Arrhythmia

Lown-Ganong-Levine syndrome, see Arrhythmia

M

Malaria

Malignancy

Manic depressive disorder, see Bipolar affective disorder

Marburg, see Viral haemorrhagic fever

Mitral regurgitation, see Valvular heart disease

Mitral stenosis, see Valvular heart disease

Mitral valve prolapse, see Valvular heart disease

Monoclonal gammopathy of undetermined significance

Multiple sclerosis, see Severe or systemic autoimmune disease

Murmur, see Valvular heart disease

Myalgic encephalomyelitis (ME)

Myocardial infarction (MI), see Coronary artery disease

N

Needlestick injury, see Innoculation injury

Nephrectomy, see Renal disease

Nephritis, see Renal disease

Nephrolithiasis, see Renal disease

Nephrotic syndrome, see Renal disease

O

Obstructive sleep apnoea

Osler-Weber-Rendu syndrome, see Bleeding disorders

Oral anticoagulant therapy, see Bleeding disorders

Osteoporosis

Overweight, see Weight

P

Pacemaker, see Arrhythmia

Paget-Schroetter syndrome, see Thrombosis and Thrombophilia

Pernicious anaemia, see Single organ autoimmune disease

Paroxysmal nocturnal haemoglobinuria (PNH), see Thrombosis and Thrombophilia

Pneumothorax

Portal vein thrombosis, see Thrombosis and Thrombophilia

Pregnancy

Prion-associated disease

Prolapsed intervertebral disc, see Back complaints

Protein C deficiency, see Thrombosis and Thrombophilia

Protein S deficiency, see Thrombosis and Thrombophilia

Prostitution, see High risk sexual behaviour

Psoriasis, see Single organ autoimmune disease

Pulmonary embolus/embolism (PE), see Thrombosis and Thrombophilia

Pulmonary regurgitation, see Valvular heart disease

Pulmonary stenosis, see Valvular heart disease

Q

R

Renal colic, see Renal disease

Renal disease

Renal vein thrombosis, see Thrombosis and Thrombophilia

Retinitis pigmentosa

Rheumatoid arthritis, see Severe or systemic autoimmune disease

Right bundle branch block, see Arrhythmia

S

Sarcoidosis, see Severe or systemic autoimmune disease

Sciatica, see Back complaints

Scleritis, see Inflammatory eye disease

Scleroderma, see Severe or systemic autoimmune disease

Second degree heart block, see Arrhythmia

Seizure, see Epilepsy

Sex worker, see High risk sexual behaviour

Severe or systemic autoimmune disease

Sickle cell disease, see Haemoglobin disorder

Sickle cell trait, see Haemoglobin disorder

Single organ autoimmune disease

Sinus bradycardia, see Arrhythmia

Sinus tachycardia, see Arrhythmia

Spinal stenosis, see Back complaints

Spondylitis, see Back complaints

Spondylolisthesis, see Back complaints

Stroke, see Cerebrovascular disease

Supraventricular tachycardia, see Arrhythmia

Surgery

SVT, see Arrhythmia

Syphilis

Systemic lupus erythematosus (SLE), see Severe or systemic autoimmune disease

T

Tattoo, body piercing and acupuncture

Thalassaemia, see Haemoglobin disorder

Thrombosis and Thrombophilia

Thrombotic thrombocytopenic purpura (TTP), see Severe or systemic autoimmune disease or Bleeding disorders

Thyroid disease, see Single organ autoimmune disease

Toxoplasmosis

Transfusion

Transient ischaemic attack (TIA), see Cerebrovascular disease

Tuberculosis

U

Ulcerative colitis, see Severe or systemic autoimmune disease

Underweight, see Weight

V

Valvular heart disease

Ventricular tachycardia/fibrillation, see Arrhythmia

Viral haemorrhagic fever

Vitiligo, see Single organ autoimmune disease

Von Willebrand disease (vWD), see Bleeding disorders

Vitamin K deficiency, see Bleeding disorders

W

Warfarin therapy, see Bleeding disorders

Wegener granulomatosis, see Severe or systemic autoimmune disease

Weight

Wenckebach (Mobitz I) heart block, see Arrhythmia

West Nile Virus

Whiplash, see Back complaints

X

Y

Z