

SUPPLEMENTARY MATERIAL

Supplementary material includes 4 tables indicating the disseminated questionnaire, the number of paediatric HPC collection centre, legal requirements on donor age limit and number of donations allowed, and 3 figures showing HPC collection centres, collection activity, and information on legal obligations and recommendations regarding mobilisation and collection techniques.

HPC = haematopoietic progenitor cells

Supplementary Table 1: Questionnaire on protection of allogeneic haematopoietic progenitor cell donors

Name:	Country:
Which type or organization are you representing?	Competent Authority: ☐ Transplant centre ☐ Stem Cell Registry unrelated donors ☐ Collection centre ☐
1. Does your country has a stem cell registry for unrelated donors?	☐ yes ☐ no
2. How many stem cell registries for unrelated donors are located in your country?	Please specify: a) Patients only (outcome registry) b) Unrelated donor registry c) Stem cell donors (unrelated and/or related) outcome registry
3. How many allogeneic HPC collection centers are available in your country for	a) Adult donors? Please specify: i. For related donors 1. Bone marrow 2. PBSC ii. For unrelated donors 1. Bone marrow 2. PBSC b) Paediatric donors? Please specify:

	i. Bone marrow ii. PBSC
4. Peripheral blood stem cells (a+b only CA; c transplant or collection center):	a) How many stem cell collections from how many donors (e.g. sometimes >1 collection in one donor) have been performed during 2017 from unrelated donors in your country? ____collections ____ donors ☐ unknown b) How many stem cell collections have been performed during 2017 from how many related donors >18 years of age in your country? ____collections ____ donors ☐ unknown c) How many stem cell collections have been performed during 2017 from how many related donors <18 years of age in your country? ____collections ____ donors ☐ unknown
5. Bone Marrow (BM) (only CA)	a) How many BM collections have been performed during 2017 from unrelated donors in your country? ____collections ☐ unknown b) How many BM collections have been performed during 2017 from related donors >18 years of age in your country? ____collections ☐ unknown

	c) How many BM collections have been performed during 2017 from related donors <18 years of age in your country? ____collections ☐ unknown
6. Unstimulated leukapheresis (only CA):	a) How many DLI collections have been performed during 2017 from unrelated donors in your country? ____collections ☐ unknown b) How many DLI collections have been performed during 2017 from related donors >18 years of age in your country? ____collections ☐ unknown c) How many DLI collections have been performed during 2017 from related donors <18 years of age in your country? ____collections ☐ unknown
7. Are data regarding SAE/SAR during the donation procedure collected ?	☐ yes ☐ no a) Are data regarding SAE/SAR during the donation procedure collected from all types of donors in the same way, that is, unrelated and related donors? ☐ yes ☐ no, if no please describe the difference b) Are data regarding SAE/SAR during the donation procedure collected from all types in the same way, that is PBSC; BM, DLI? ☐ yes ☐ no, if no please describe the difference

	c) Are outcome data on all donors with SAE/SAR collected? ☐ yes ☐ no
8. Who is responsible for SAE/SAR data collection?	
9. Are these data collected:	☐ obligatory ☐ voluntary a) is there a legal requirement? ☐ yes ☐ no b) is there a requirement to enter data into a database ☐ yes ☐ no c) are data analyzed in regular intervals? Reported to an international organization? If yes, to which?
10. Do you have a centralized donor outcome registry in your country?	☐ yes ☐ no a) Are data from unrelated donors collected? ☐ yes ☐ no b) Are data from related donors collected? ☐ yes ☐ no c) are data from both related and unrelated donors collected in the same database? ☐ yes ☐ no d) is donor outcome follow up (independent of patient outcome follow up)? ☐ yes ☐ no
11. Are data on potential long-term complications collected prospectively?	☐ yes ☐ no a) Do these data on long-term complications include incidence and type of malignancies? ☐ yes ☐ no

	b) Do these data on long-term complications include incidence and type of autoimmune disorders? ☐ yes ☐ no c) Do these data on long-term complications include cardiovascular or thrombo-embolic disorders? ☐ yes ☐ no d) Do these data on long-term complications include other disorders? If yes: specify:..... e) Are data on long-term complications collected on all donors unrelated and related in the same way? ☐ yes ☐ no f) How is long-term follow up defined in your country (e.g. 2y, 5y, 10y, 10+y)? Please specify: Up to ____ years g) Is long-term follow-up the same for adult and pediatric donors? ☐ yes ☐ no, if no please specify:
12. Who is responsible for data collection on long-term complications for unrelated donors (donor recruitment center or procurement center)	☐ unrelated donor registry ☐ procurement (collection) centre ☐ ☐ other, please specify:
13. Who is responsible for data collection on long-term complications for related	☐ clinical facility ☐ procurement center ☐ unrelated donor registry ☐ other, please specify:

donors (clinical facility or procurement center)?	
14. Are these data collected:	☐ obligatory ☐ voluntary a) Is there a legal requirement? ☐ yes ☐ no b) Is there a requirement to enter data into a database ☐ yes ☐ no
15. Do you have any kind of insurance (disability insurance, not only health insurance) for unrelated donors?	☐ yes ☐ no a) Is the insurance legally mandatory? ☐ yes ☐ no
16. Do you have any kind of insurance (disability insurance, not only health insurance) for related donors?	☐ yes ☐ no
17. Do you have a legal obligation on:	a) Upper/lower Age limit for donation for unrelated donors? ☐ yes ☐ no If yes specify: b) Upper/lower Age limit for donation for related donors? ☐ yes ☐ no If yes specify:

	c) Number of donations allowed for unrelated donors (PBSC and or BM)? ☐ yes ☐ no If yes specify: d) Number of donations allowed for related donors (PBSC and or BM)? ☐ yes ☐ no If yes specify: e) Maximal dose of G-CSF ($\mu\text{g/kg}$) per day for unrelated donors? ☐ yes ☐ no If yes specify: f) Maximal dose of G-CSF ($\mu\text{g/kg}$) per day for related donors? ☐ yes ☐ no If yes specify: g) Maximum volume per donation (volume for apheresis or volume for BM collection) for unrelated donors? ☐ yes ☐ no If yes specify: h) Maximum volume per donation (volume for apheresis or volume for BM collection) for related donors? ☐ yes ☐ no If yes specify: i) Maximum number of unstimulated leukapheresis (DLI) allowed for unrelated donors? ☐ yes ☐ no If yes specify:
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	j) Maximum number of unstimulated leukapheresis (DLI) allowed for related donors? ☐ yes ☐ no If yes specify: k) The use of new mobilizing agents (e.g. binding inhibitors) for unrelated donors? ☐ yes ☐ no If yes specify: l) The use of new mobilizing agents for related donors? ☐ yes or ☐ no If yes specify:
18. Do you have a recommendation on	a) Age limit for donation for unrelated donors? Regulation ☐ yes ☐ no If yes specify: b) Age limit for donation for related donors? ☐ yes ☐ no If yes specify: c) Number of donations allowed for unrelated donors? ☐ yes ☐ no If yes specify: d) Number of donations allowed for related donors? ☐ yes ☐ no If yes specify: e) Maximal dose of G-CSF ($\mu\text{g/kg}$) per day for unrelated donors? ☐ yes ☐ no If yes specify: f) Maximal dose of G-CSF ($\mu\text{g/kg}$) per day for related donors? ☐ yes ☐ no

	If yes specify: g) Maximum volume per donation (volume for apheresis or volume for BM collection) for unrelated donors? ☐ yes ☐ no If yes specify: h) Maximum volume per donation (volume for apheresis or volume for BM collection) for related donors? ☐ yes ☐ no If yes specify: i) Maximum number of unstimulated leukapheresis (DLI) allowed for unrelated donors? ☐ yes ☐ no If yes specify: j) Maximum number of unstimulated leukapheresis (DLI) allowed for related donors? ☐ yes ☐ no If yes specify: k) The use of new mobilizing agents (e.g. binding inhibitors) for unrelated donors? ☐ yes ☐ no If yes specify: l) The use of new mobilizing agents for related donors? ☐ yes ☐ no If yes specify:
19. Are there specified donor eligibility criteria for unrelated donors?	☐ yes ☐ no

20. Are there specified donor eligibility criteria for related donors?	☐ yes ☐ no
21. Do specific donor eligibility criteria for paediatric donors exist?	☐ yes ☐ no
22. Is it allowed for paediatric donors to donate for an adult relative?	☐ yes ☐ no
23. If yes, at which age?	Please specify:

Supplementary Table 2: Number of paediatric collection centres

	PBPC	BM
Armenia	0	0
Austria	*	*
Bulgaria	1	1
Croatia	1	1
Czech Republic	1	1
Finland	1	1
France	0**	13
Germany	*	*
Hungary	2	2
Ireland	1	1
Israel	5	5
Italy	0**	23
Republic of Moldova	0	0
Norway	1	0
Poland	6	6
Portugal	4	4
Russia	4	4
Spain	16	16
Sweden	6	6
Switzerland	3	3
the Netherlands	*	*
Türkiye	26	26
United Kingdom	16	0

*Not possible to differentiate between adult and paediatric donors

**Not permitted

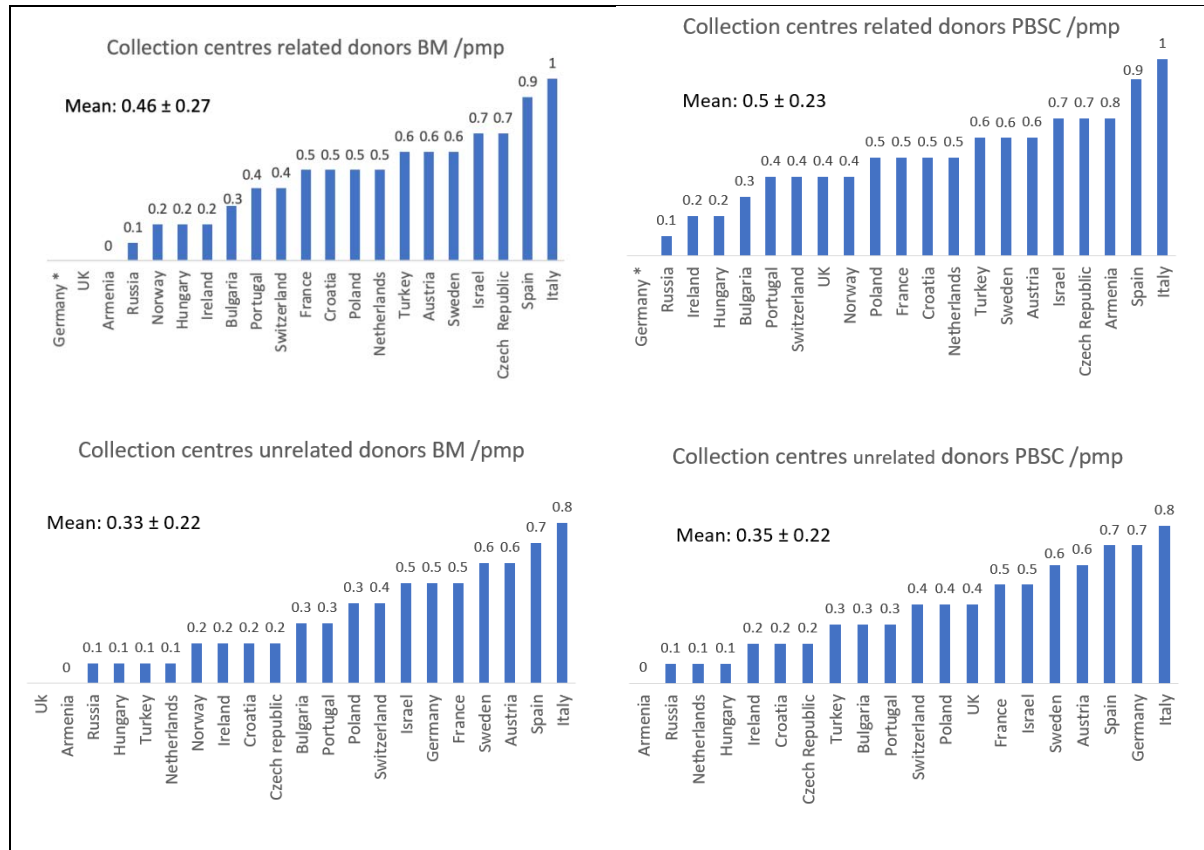
Supplementary Table 3: Legal requirements on donor age limit

Related and Unrelated	Only unrelated	Only related with minor	No legal requirements
Austria	Bulgaria	Israel	Armenia
Finland	Czech Republic		Croatia
Germany	France		Ireland
Portugal	Hungary		Poland
Türkiye	Italy		Sweden
	The Netherlands		
	Norway		
	Russia		
	Spain		
	Switzerland		
	United Kingdom		

Supplementary Table 4: Legal requirements on the number of donations allowed

Related and Unrelated	Unrelated	Related	No legal requirements
Türkiye	France	Armenia	Austria
	Israel		Bulgaria
	Switzerland		Czech Republic
			Croatia
			Finland
			Germany
			Hungary
			Ireland
			Italy
			The Netherlands
			Norway
			Portugal
			Russia
			Spain
			Sweden
			United Kingdom

Supplementary Figure 1: Bone marrow (BM) and peripheral blood progenitor cell (PBPC) collection centres for related and unrelated donors.

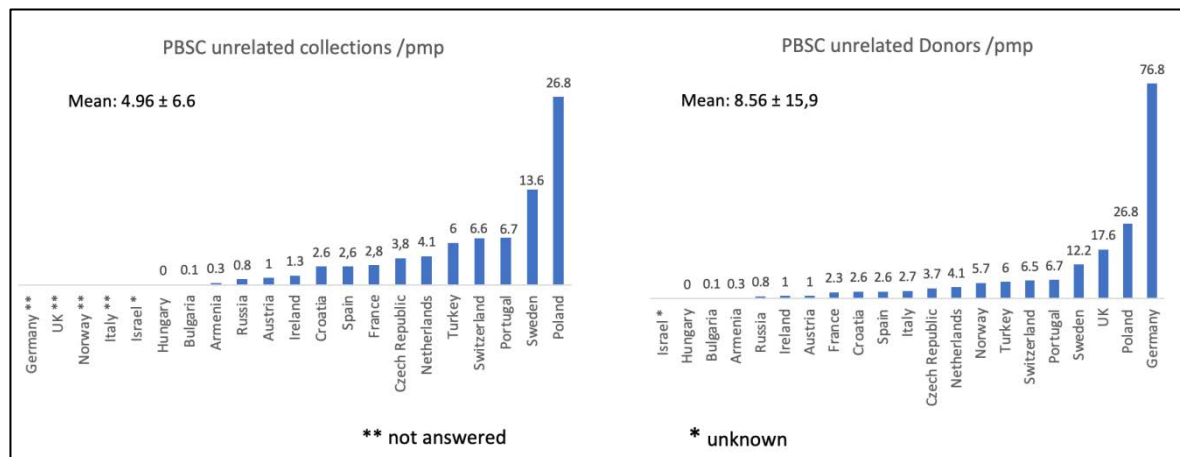


Supplementary Figure 1. The blue bars indicates the number of collection centres for the collection of bone marrow (BM) and peripheral blood stem cells in related and unrelated donors per million population (pmp).

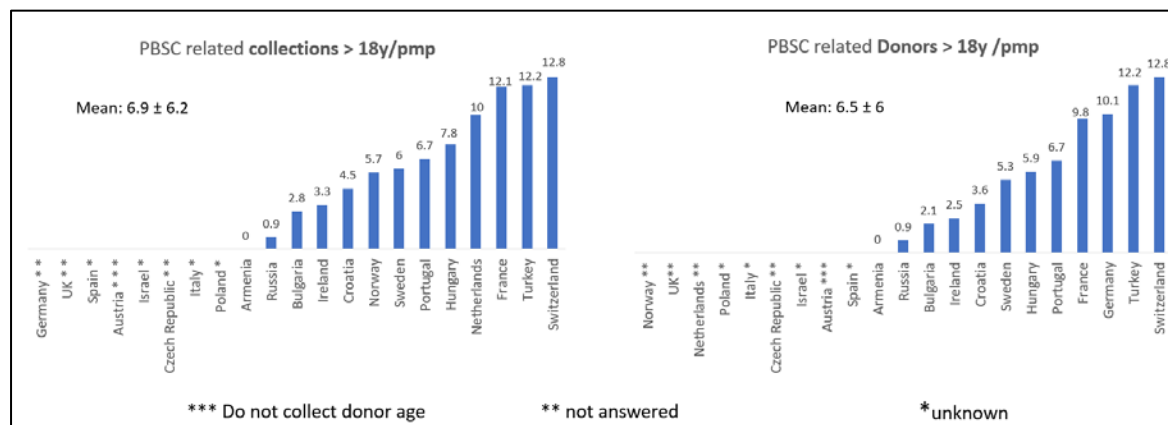
*indicates that the country collects data without differentiation between related or unrelated.

Supplementary Figure 2: Collection activity

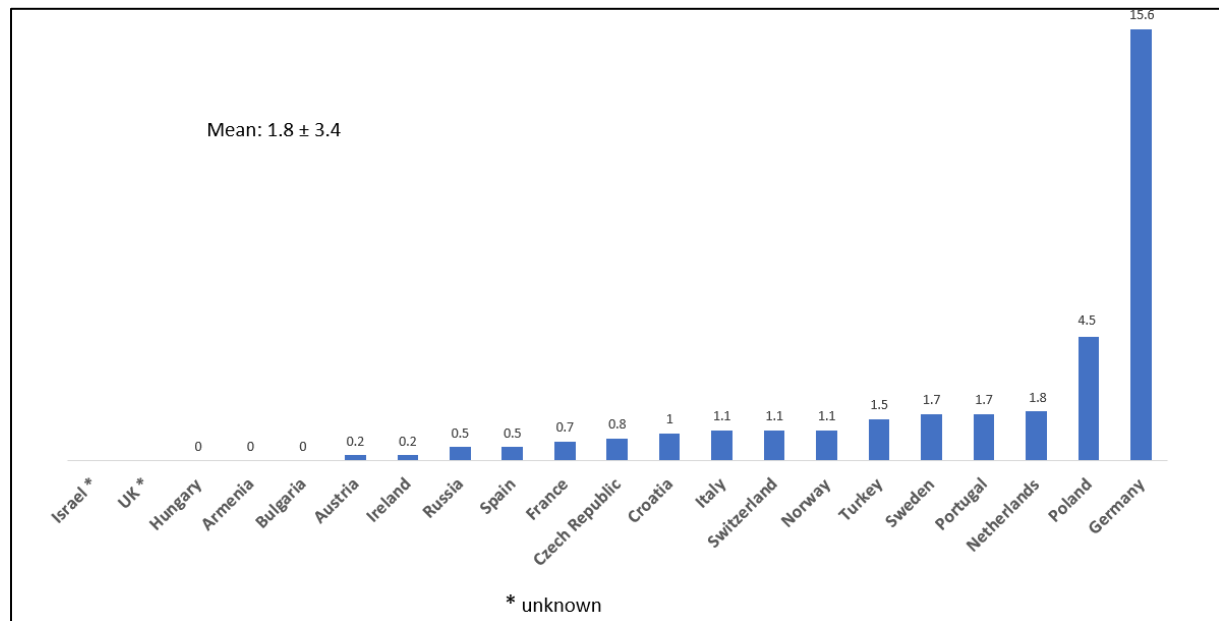
2a Unrelated donors: peripheral blood progenitor cell (PBPC) collections and donors per million population (pmp)



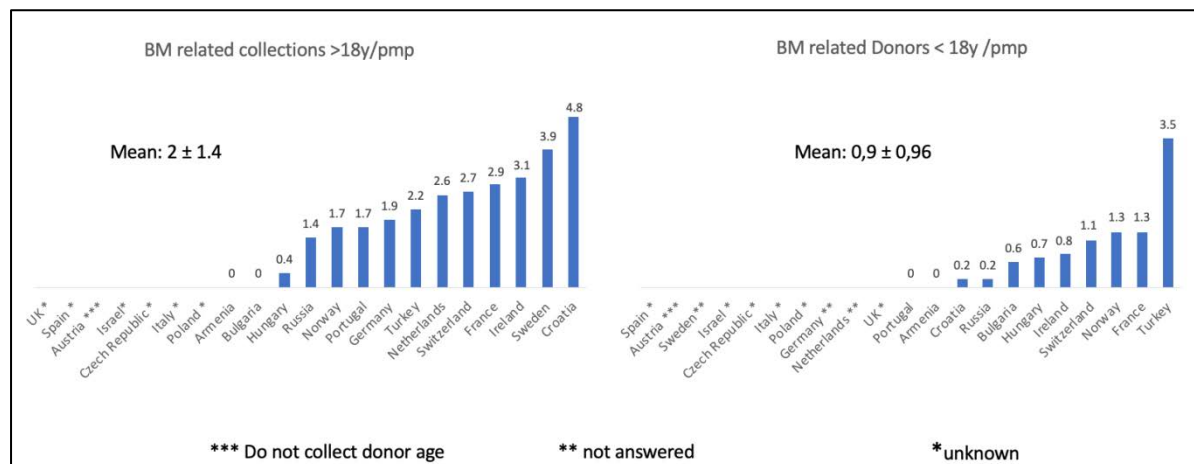
2b Related donors >18 years of age: PBPC collections and donors per million population (pmp)



2c Unrelated donors: Bone marrow collections per million population (pmp)



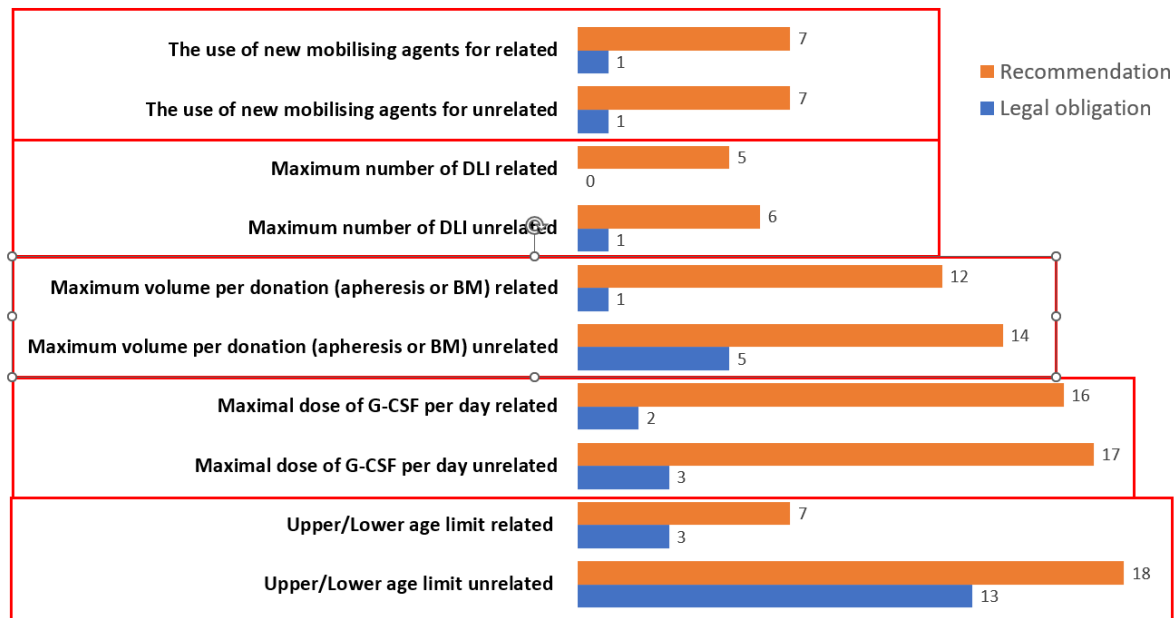
2d Related donors (>18 years and <18 years of age): Bone marrow collections per million population (pmp)



Supplementary Figure 2: shows the collection activity of collections and donors per million population (pmp) given in blue bars in: unrelated peripheral blood progenitor cell (PBPC) donors (Supplementary Figure 2a), related PBPC donors >18 years of age (Supplementary Figure 2b), unrelated donor bone marrow collections (Supplementary Figure 2c), and related

donor bone marrow collections in donors >18 years and <18 years of age (Supplementary Figure 2d).

Supplementary Figure 3: Legal obligations and recommendations on related and unrelated donors



Supplementary Figure 3: shows legal obligations and recommendations on related and unrelated donors for use of new mobilising agents, maximum number of donor lymphocyte infusions (DLI), maximum volume per donation (apheresis or bone marrow; BM), maximal dose of G-CSF per day and upper/lower age limit. Recommendations are depicted in orange whereas legal obligations are given in blue bars.