SUPPLEMENTARY APPENDIX

The increase of the global donor inventory is of limited benefit to patients of non-Northwestern European descent

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 doi:10.3324/haematol.2016.145730

Received: March 7, 2016.

Accepted: August 22, 2016.

Pre-published: August 25, 2016.

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Supplemental data to manuscript: The increase of the global donor inventory is of limited benefit to patients of non-North-Western European descent.

Additional information patients and methods.
The evaluable search cases (n=3124) originated from the following Transplant Centers: Academic Medical Centre Amsterdam (n=131), Erasmus Medical Centre Rotterdam (n=479), Free University Medical Centre Amsterdam(n=216), Leiden University Medical Centre (n=831, of which 312 pediatric patients), Maastricht University Medical Centre (n=141), University Medical Centre Groningen (n=74), University Medical Centre Nijmegen (n=391, of which 80 pediatric patients), University Medical Centre Utrecht (n=861, of which 241 pediatric patients). Data were collected from the Europdonor national search database and patients' files in the search units in Leiden en Nijmegen.

Back-up donor
In Cohort I, 70 patients (9·3% of NWE and 5·5% of non-NWE patients) and in Cohort II 170 patients (9·8% of NWE and 7·8% of non-NWE patients) received haematopoietic cells from a back-up donor (n=234) or a back-up cord blood unit (n=6), when the initial chosen donor was no longer available. Apart from the chosen donor being deferred or no longer available during work up, in both cohorts in four cases the Transplant Center decided to switch to the back-up donor, because the identified donor was only able or willing to donate bone marrow, where PBSC was preferred. In one case the donor did not show up on day of aphaeresis. In 10 cases (Cohort I n=3, Cohort II=7) a new search for a back-up donor had to be initiated, causing an median delay of 15 days (range 0-412 days) to transplantation, compared to median 9 days range 1-181 days) if a back up donor was available. In 27 cases the match-grade of the backup donor was lower than the originally identified donor.

Matchgrade CB units:
Matching for cord blood was limited to HLA-A* and –B* (serological split level) and –DRB1* (high resolution). Cord blood as an alternative haematopoietic cell source was needed more frequently for NNWE patients in both cohorts ($p<0.0001$), although better matched (6/6) units were more often found for NWE patients ($p<0.002$). In double cord transplantations, a minimum matchgrade of 4/6 between each cord blood and patient, and between cord bloods was required.

Single cord	NWE I (n=20)	NNWE I (n=21)	p	NWE II (n=82)	NNWE II (n=40)	p
6/6*	6	1	0.04	38	5	0.0002
5/6	10	18	n.s.	36	29	n.s.
4/6	4	2		5	5	
4/6 + haplo				1		
5/6 + haplo				2	1	
Double cord	(n=12)	(n=1)		(n=101	(n=34)	
6/6 + 6/6						
6/6 + 5/6				7		
6/6 + 4/6	1			3		
5/6 + 5/6	2			21	8	
5/6 + 4/6	8			37	12	
4/6 + 4/6	1	1	n.s.	33	14	n.s.

*Fisher's exact test

Matchgrade non-NWE and mixed background patients:

No significant differences in match-grade were seen in patients from non-NEW descent, or with a mixed background (i.e. (grand) parents originated from different ethnic populations.

	NNWE I (n=74)	MIX I (n=49)	p	NNWE II (n=153)	MIX II (n=76)	p
Donor found (%)	58 (78.4)	38 (77.6)	n.s.	112 (73.2)	58 (76.3)	n.s.
10/10	19	9	n.s.	25	16	n.s.
9/10	17	12	n.s.	41	17	n.s.
CB	16	15		41	23	
Reached trx (%)	46 (62.2)	26 (53.1)	n.s.	88 (57.5)	45 (59.2)	n.s

*Fisher's exact test