



# HLA in Unrelated Stem cell transplantation

Prof. M-P. Emonds



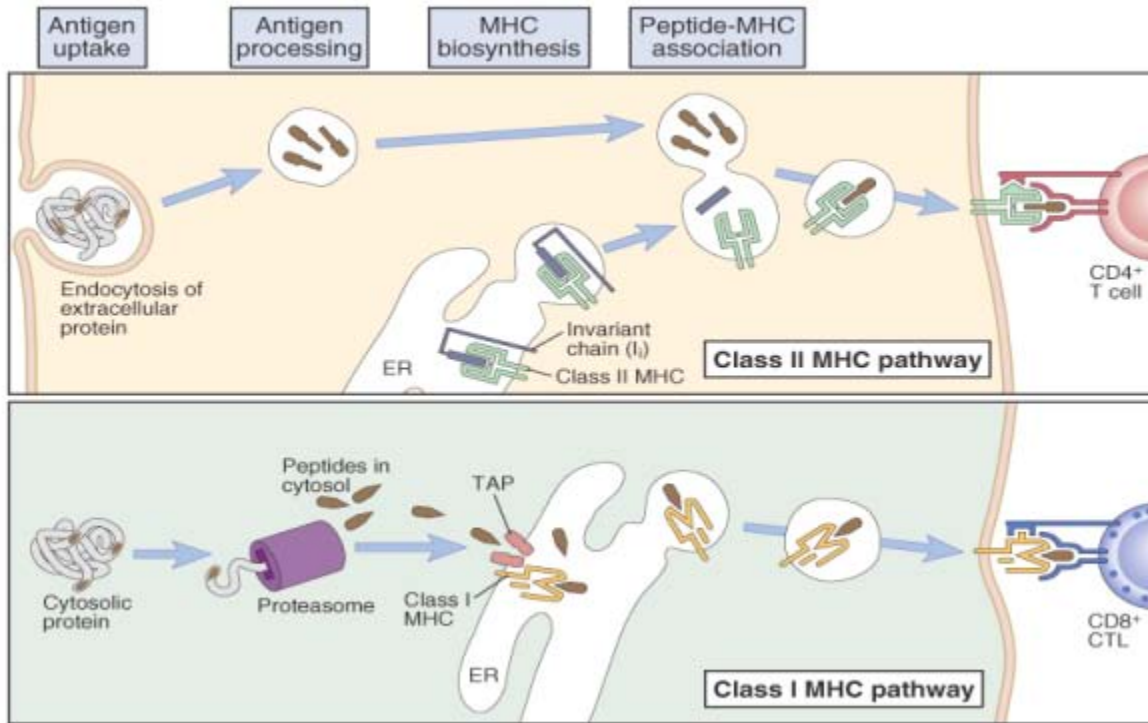
1. HLA system/Nomenclature



2. Inheritance / Extended  
haplotype / Linkage disequilibrium

3. Search examples






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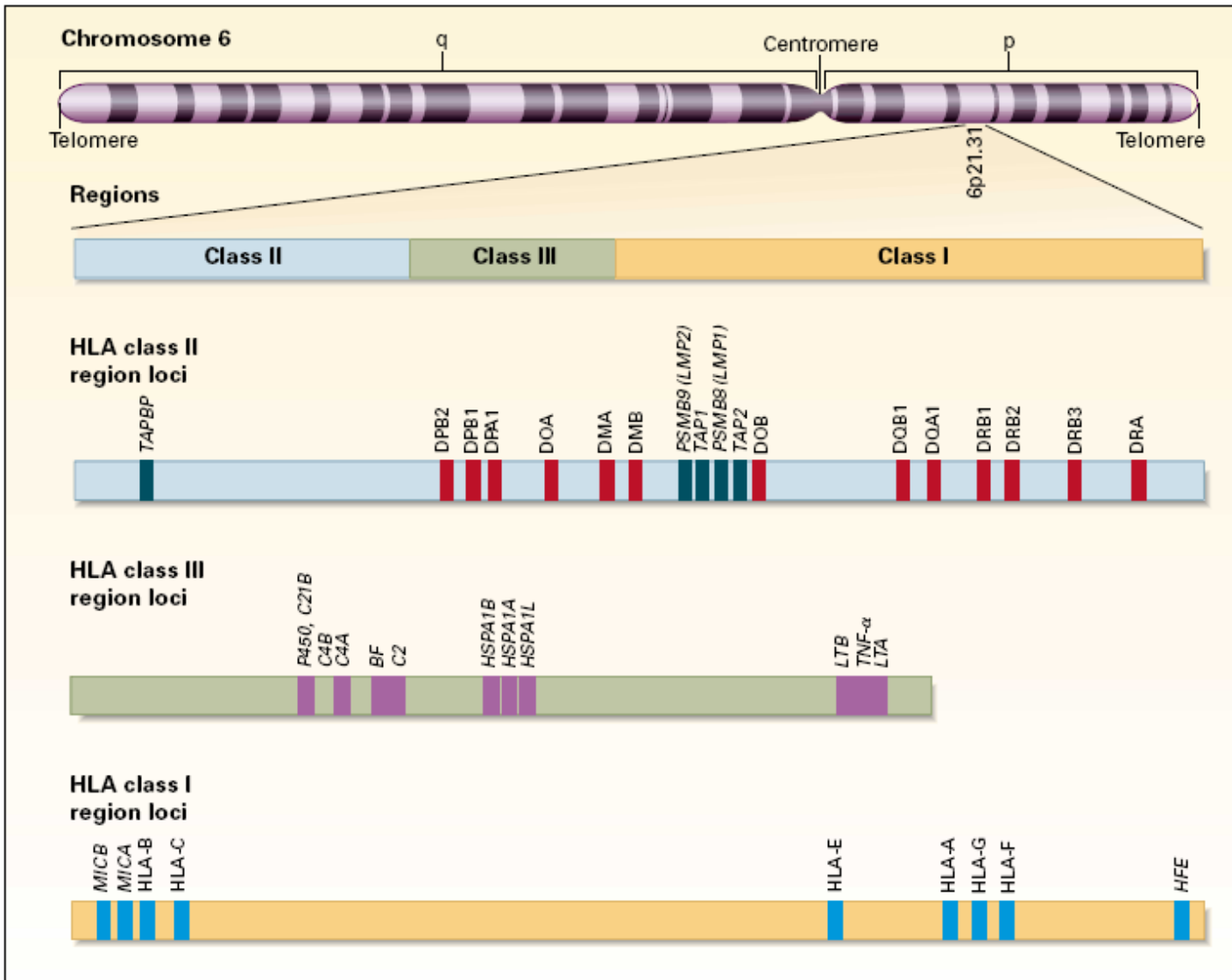
## Presentation and Recognition

**HLA Antigens:** antennae to recognize foreign germs or viruses (peptides) entering the body and communicate this information to the white blood cells to initiate an immune response.

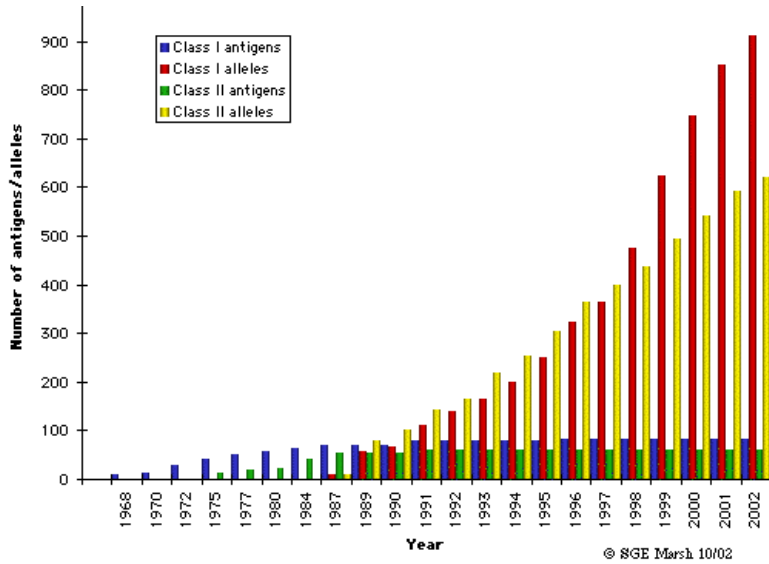
In stemcell transplantation, **patient HLA (immune system) is replaced by donor HLA (immune system)**

- > Rejection in case of mismatches
- > Graft versus Host disease if donors recognises patient as foreign
- > Insufficient recognition will lead to overwhelming infection

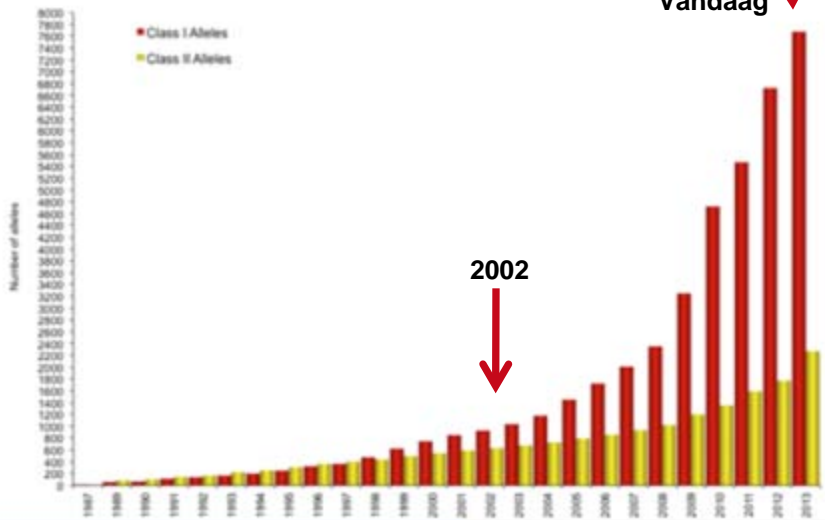
# Majeure Histocompatibilitetscomplex: MHC



# Detected polymorphism in classical HLA



Vandaag



Serology Antigen (MD)	DNA: Allele (low and high resolution)
A3, A2, A11, A24, .....	A*03:01 A*03:02...
B61, B7, ...	B*40:02 B*40:06...
DR15, DR4, ....	DRB1*15:01 DRB1*15:02 DRB5*01:01

## D - HLA ALLELES AND ANTIGENS

**D1.000** *Terminology* of HLA alleles and antigens must conform to the latest report of the WHO Committee on Nomenclature.

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Nomenclature	Indicates
HLA	the HLA region and prefix for an HLA gene
HLA-DRB1	a particular HLA locus i.e. DRB1
HLA-DRB1*13	a group of alleles which encode the DR13 antigen
HLA-DRB1*13:01	a specific HLA allele
HLA-DRB1*13:01N	a null allele
HLA-DRB1*13:01:02	an allele which differs by a synonymous mutation
HLA-DRB1*13:01:01:02	an allele which contains a mutation outside the coding region
HLA-DRB1*1301:01:02N	a null allele which contains a mutation outside the coding region

**13AGM** 1301/1316/1322/1327 Multiple allele codes

**HLA DR13** : serological nomenclature / also used for serological equivalent (Match determinant), used for search purposes  
(MICA, MICB, *KIR genes*, LMP & TAP are named by the same nomenclature committee)

[www.efi.org](http://www.efi.org); [www.bmdw.org](http://www.bmdw.org); [www.nmdp.org](http://www.nmdp.org);

# HLA typing -> to find an HLA identical donor

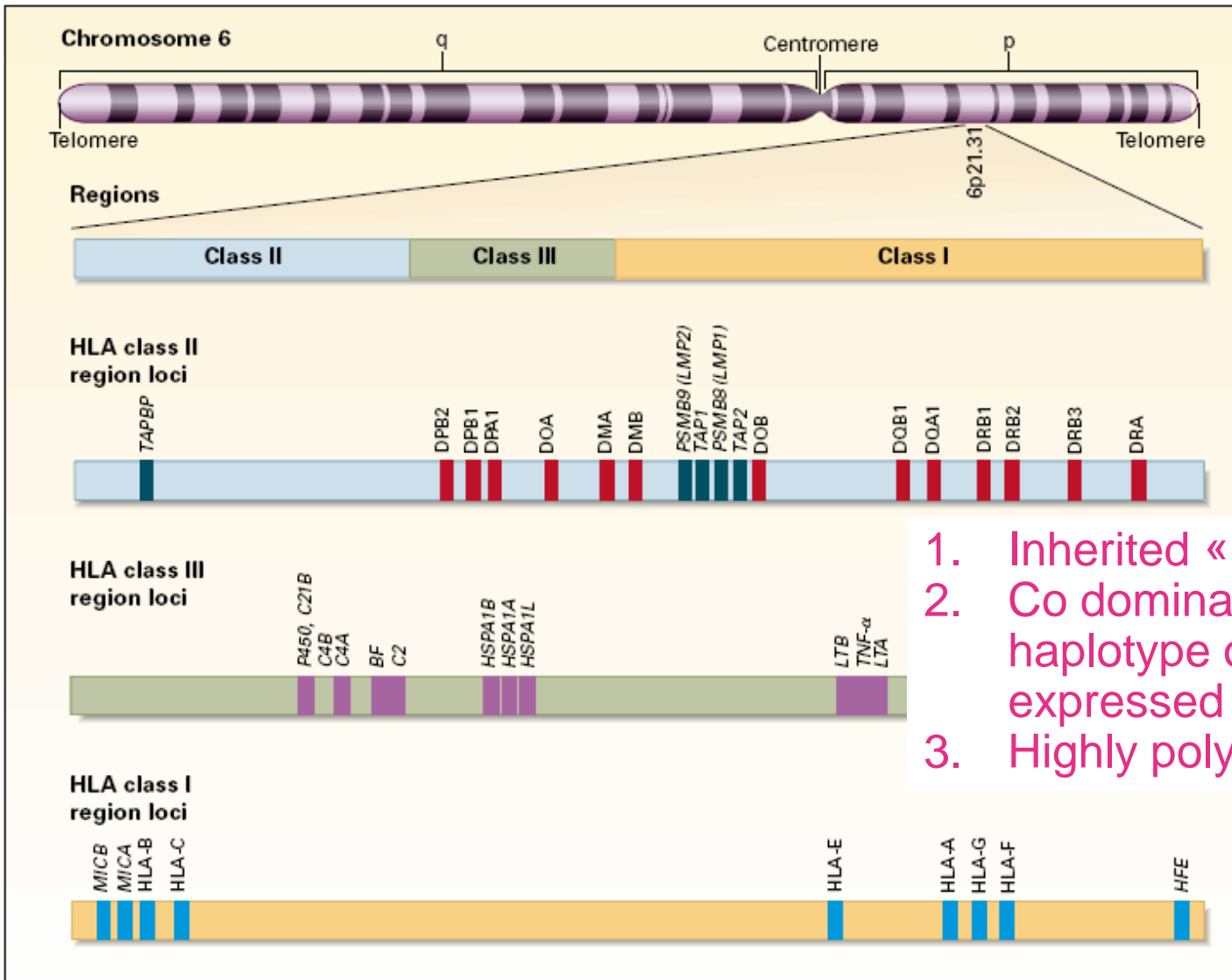
Bepaling	HLA A	HLA B	HLA Cw	HLA DRB1 HR	HLA DQB1
<b>HR Typing</b> (2nd Field)	A*26:01 A*33:03 <i>28/10/13 11:00</i>	B*55:01 B*58:01 <i>28/10/13 11:00</i>	C*03:02 C*03:03 <i>28/10/13 11:00</i>	DRB1*11:01 DRB1*13:02 <i>28/10/13 11:00</i>	DQB1*03:01 DQB1*06:09 <i>28/10/13 11:00</i>
<b>LR Typing</b> (1st field)	A*26 A*33 <i>17/10/13 08:00</i>	B*55 B*58 <i>17/10/13 08:00</i>	C*03 C*03 <i>17/10/13 08:00</i>	DRB1*11 DRB1*13 <i>17/10/13 08:00</i>	DQB1*03 DQB1*06 <i>17/10/13 08:00</i>
<b>Match determinant:</b>	A26(A10) A33(A19) <i>17/10/13 08:00</i>	B55 B58(B17) <i>17/10/13 08:00</i>	Cw10(Cw3) Cw9(Cw3) <i>17/10/13 08:00</i>	DR11(DR5) DR13(DR6) <i>17/10/13 08:00</i>	DQ7(DQ3) DQ6(DQ1) <i>17/10/13 08:00</i>

LR typing: (2 digits) 1st field mismatch = Antigenic mismatches

HR typing: (4 digits) 2nd field mismatch = allelic mismatches

Match Determinant: 1<sup>st</sup> field, used for matching algorithm

# Majeure Histocompatibilit tscomplex: MHC



1. Inherited « en bloc »
2. Co dominant expression, haplotype of each parent is expressed
3. Highly polymorphic



Moeder van Bas	
Maria	
A	B
A*02	A*11
B*49	B*56
Cw*07	Cw*01
DRB1*04	DRB1*07
DQB1*03	DQB1*03

Vader van Bas	
Joannes	
C	D
A*03	A*31
B*35	B*51
Cw*04	Cw*15
DRB1*01	DRB1*11
DQB1*05	DQB1*03

Ria, Partner van Bas, moeder van Joeri	
E	F
A*29	A*03
B*07	B*50
DRB1*12	DRB1*08

Patiënt	
Bas	
B	C
A*11	A*03
B*56	B*35
Cw*01	Cw*04
DRB1*07	DRB1*01
DQB1*03	DQB1*05

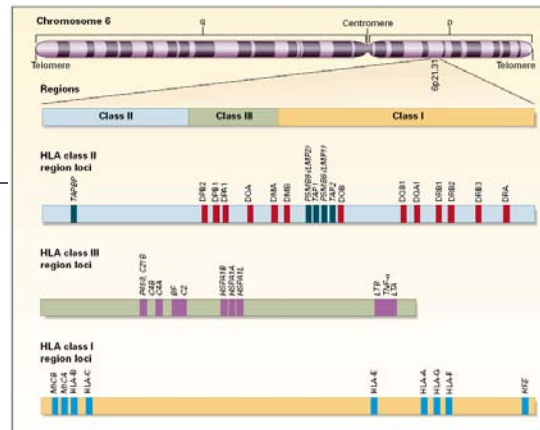
Broer van Bas	
Jan	
A	C
A*02	A*03
B*49	B*35
DRB1*04	DRB1*01

Zus van Bas	
Eva	
B	D
A*11	A*31
B*56	B*51
DRB1*07	DRB1*11

Zus van Bas	
Lies	
A	D
A*02	A*31
B*49	B*51
DRB1*04	DRB1*11

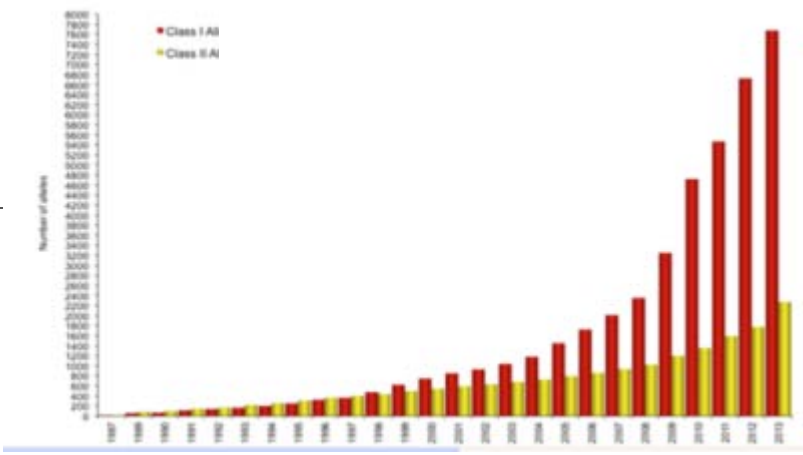
Broer van Bas	
Tim	
B	C
A*11	A*03
B*56	B*35
Cw*01	Cw*04
DRB1*07	DRB1*01
DQB1*03	DQB1*05

Kind van Bas & Ria	
Joeri	
B	F
A*11	A*03
B*56	B*50
DRB1*07	DRB1*08



Moeder van Bas		Vader van Bas							
Maria		Joannes							
A	B	C	D						
A*02	A*11	A*03	A*31						
B*49	B*56	B*35	B*51						
Cw*07	Cw*01	Cw*04	Cw*15						
DRB1*04	DRB1*07	DRB1*01	DRB1*11						
DQB1* 03	DQB1* 03	DQB1* 05	DQB1* 03						
Patiënt		Broer van Bas		Zus van Bas		Zus van Bas		Ria, Partner van Bas, moeder van Joeri	
Bas		Jan		Eva		Lies		E	F
B	C	A	C	B	D	A	D	A*29	A*03
A*11	A*03	A*02	A*03	A*11	A*31	A*02	A*31	B*07	B*50
B*56	B*35	B*49	B*35	B*56	B*51	B*49	B*51	DRB1*12	DRB1*08
Cw*01	Cw*04	DRB1*04	DRB1*01	DRB1*07	DRB1*11	DRB1*04	DRB1*11		
DRB1*07	DRB1*01								
DQB1* 03	DQB1* 05								
Kind van Bas & Ria									
Joeri									
B	F								
A*11	A*03								
B*56	B*50								
DRB1*07	DRB1*08								

A*11:01	A*03:01	
B*56:01	B*35:08	
C*01:02	C*04:01	
DRB1*07:01		DRB1*01:02
DQB1*03:03		DQB1*05:01





## Start MUD search (1)

1. registration by transplantcenter if HLA data are OK



2. Verify chance to find a suitable donor ([www.bmdw.org](http://www.bmdw.org))



3. Be informed on the urgency & the required matching degree. This might influence the search strategy



4. MDPB standards: have to be fulfilled. For HLA: at least a 9/10 match for a MUD donor; at least 4/6 for a CB.



## Start MUD search (2)

1. EFI Requirement patient: Confirmed, High resolution A B C DR DQ (null alleles excluded) - 2nd Field typing

2. Verify the HLA typing of the donor to the same extend as the matching requirement before starting the work up

3. Requirements for initial donortyping as less stringent





## Start MUD search (3)

1. EFI Requirement Cord Donor: initial typing: A B low DRB1 High resolution

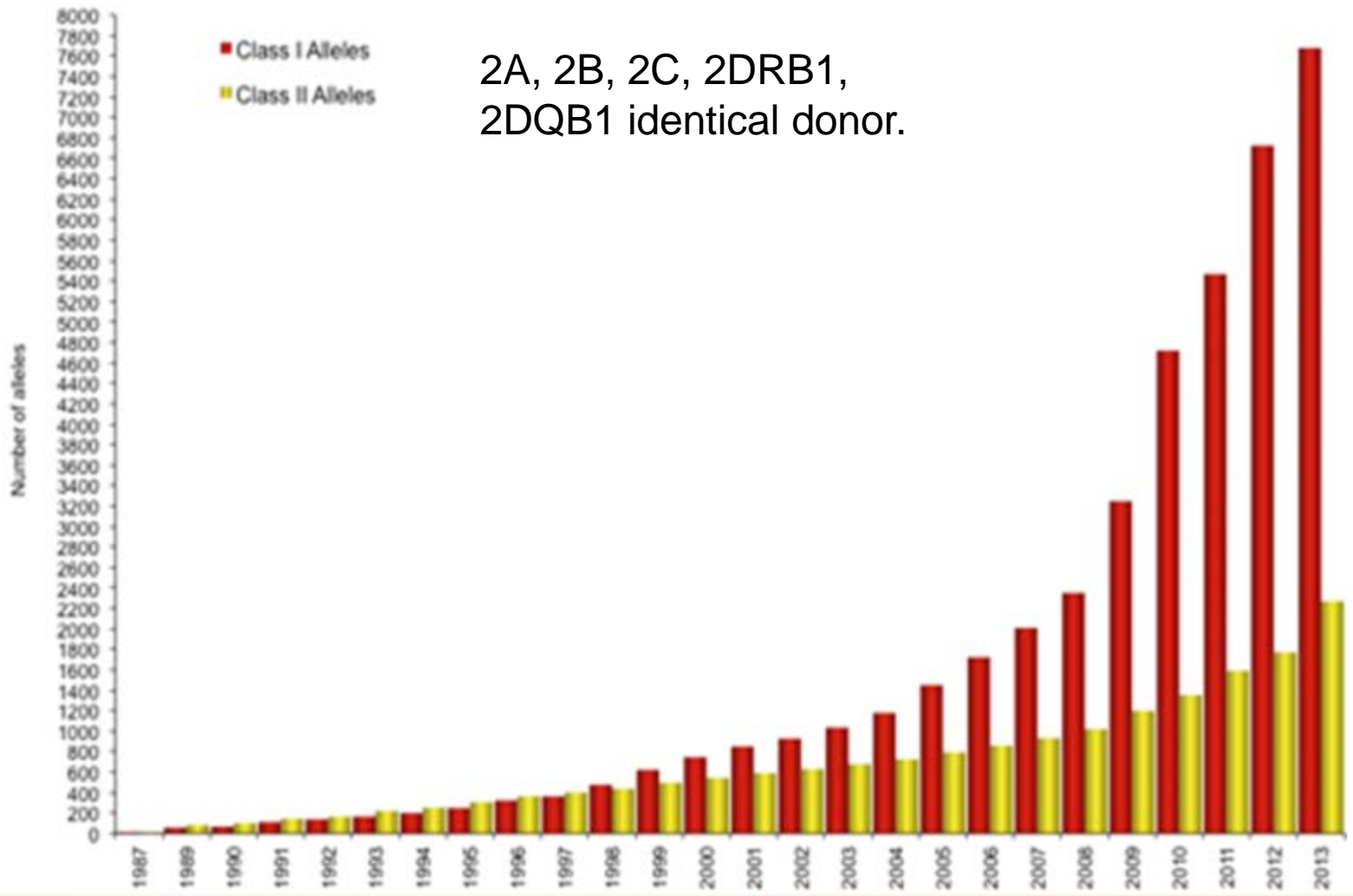


2. Verify the HLA typing on a segment before it leaves the CBB.



3. Verify the HLA typing of a segment of the CB to the same extend as the matching requirement after receipt in the transplantcenter. Standard: LR AB HR DRB1





2A, 2B, 2C, 2DRB1,  
2DQB1 identical donor.

# Many donors in international registries

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## BONE MARROW DONORS WORLDWIDE

### **Welcome to Bone Marrow Donors Worldwide**

Bone Marrow Donors Worldwide (BMDW) is the continuing effort to collect the HLA phenotypes and other relevant data of volunteer stem cell donors and cord blood units, and is responsible for the co-ordination of their worldwide distribution. Participants are 71 stem cell donor registries from 51 countries, and 48 cord blood banks from 32 countries.

The current number of donors and cord blood units in the BMDW database is:

**22,578,604** (21,983,667 donors and 594,937 CBU's)

There are currently 860 users from 518 organisations authorized to access the on-line BMDW services.

To find, faster, more donors, that are high resolution typed, near to the patient.  
And for more (but not all) patients.

Figure 8  
The distribution of stem cell donors per continent

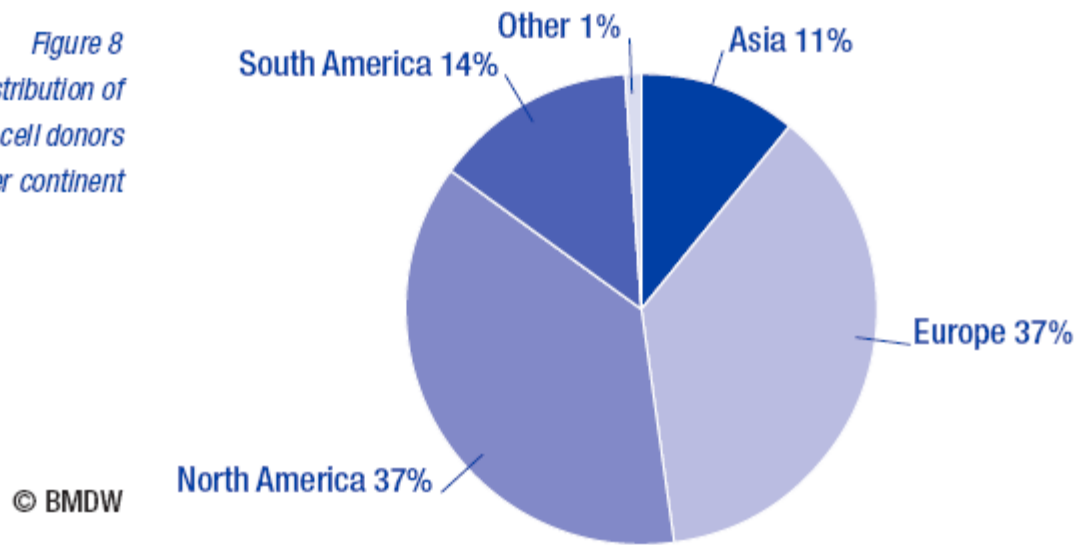
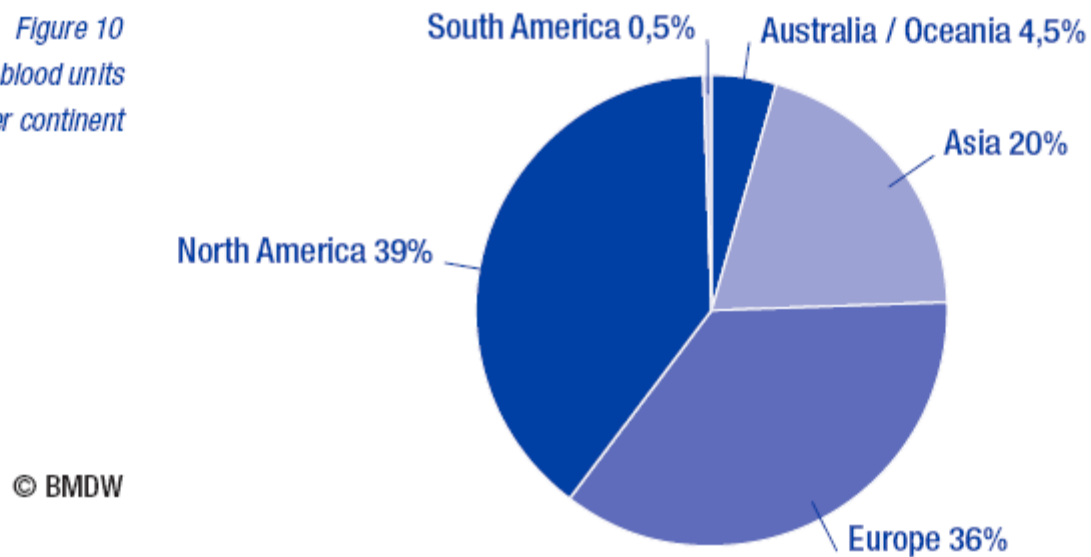
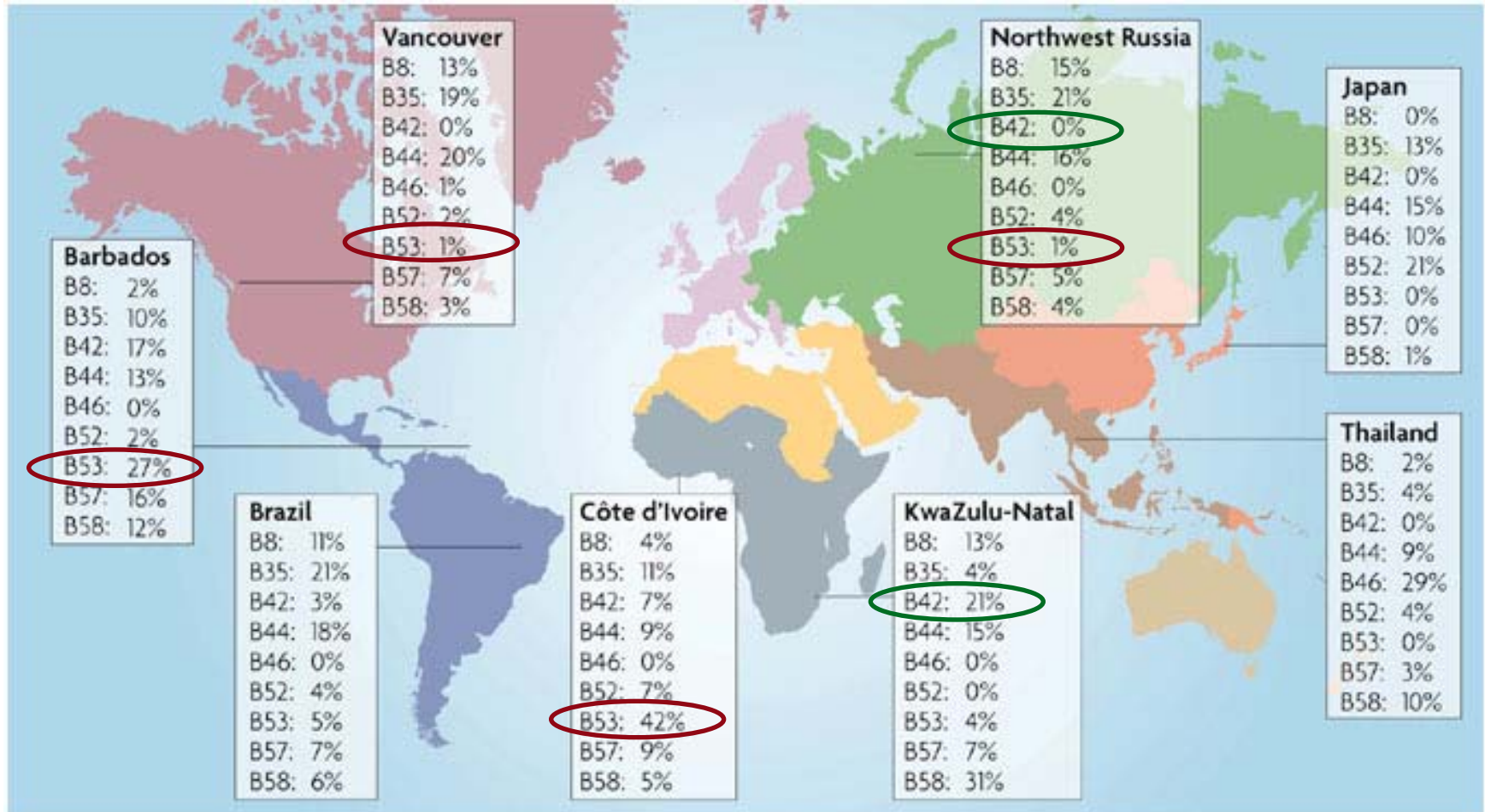


Figure 10  
Distribution of cord blood units per continent





# Racial differences in HLA type



# Distribution of HLA alleles

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A1 B8 DR3 .048324 A3 B7 DR15 .033044

**EXTENDED HAPLOTYPE**: is niet verwant haplotype dat qua genetische origine erg homogeen is waardoor de hele regio (4000 kb van het MHC) een gelijkens vertoont bij onverwanten alsof zij genetisch verwant waren (overgeërfd).

Het zijn meestal frequente haplotypes (tgv afwezigheid recombinatie hot spots, bewaard door natuurlijke selectie)

**LINKAGE DISEQUILIBRIUM**: Bepaalde combinaties komen veel frequenter voor dan verwacht. Daarenboven is er bvb een zeer sterke linkage tussen DRB1 & DQB1 en tussen B & Cw. (bvb DRB1\*1401,DQB1\*0503)

# Frequent HLA haplotype

- HLA-C considered
- HLA-DQ considered
- Extended sorting on DRB1

A	B	C	DRB1	DQB1	Reg	#	Additional details
0101	0801	0702	0301	0201			DRB3/4/5

**Allele matched: 31**

0101	0801		0301	0201	PL4	1	
0101	0801		0301	0201	D	1	3*01XX
0101	0801		0301	0201	D	6	3*0101
0101	0801		0301	0201	D	5	
0101	0801		0301		TW	1	
0101	0801		0301		PL3	2	
0101	0801		0301		PL	1	
0101	0801		0301		D	14	

**Potentially (Allele) Matched: 16939**

0101	0801		0301	03AD	D	4	
0101	0801	08XX	0301	03AD	D	13	
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BMDW Match Programs  
Run Date: 18-Oct-2010

## Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: test20102010      Last name: test      First name: test

Search determinants: A: 1, B: 8, DR: 17,

A	B	C	DRB1	DQB1	Reg	#	Additional details
01:01	08:01	07:01	03:01	02:01			DRB3/4/5

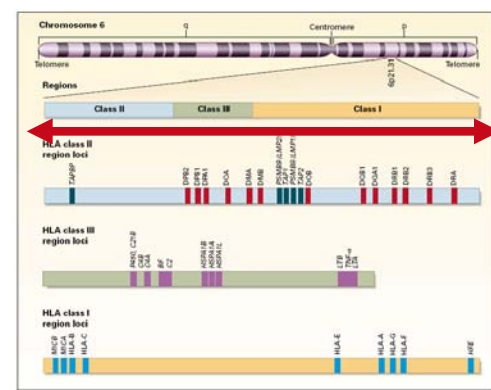
**Allele matched: 511**

01:01	08:01	07:01	03:01	02:01	D	1	3*01:01 4*NNNN 5*NNNN
01:01	08:01	07:01	03:01	02:01	A	1	3*01:01
01:01	08:01	07:01	03:01	02:01	CH	1	3*01:01
01:01:01	08:01:01	07:01	03:01:01	02:01:01	D	2	3*01:01
01:01	08:01	07:01	03:01	02:01	D	1	3*03:01
01:01	08:01	07:01	03:01	02:01	D	7	3*01:01
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01	02:01	D	10	3*01:01
01:01	08:01	07:01	03:01:01	02:01	D	7	3*01:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01
01:01	08:01	07:01	03:01	02:01	F	2	3*01:01
01:01	08:01	07:01	03:01	02:01	F	1	3*01:01
01:01	08:01	07:01	03:01	02:01	F	2	3*01:01

**2007: 31** HR typed donors without C

**2010: 511** HR typed donors incl. HLA-C

## Extended haplotype



# Increased number of High Resolution, typed donors

Frequent HLA haplotype

Recipient ID: test20102010      Last name: test      First name: test

Search determinants: **A: 1, B: 8, DR: 17,**

10/10 matched donor

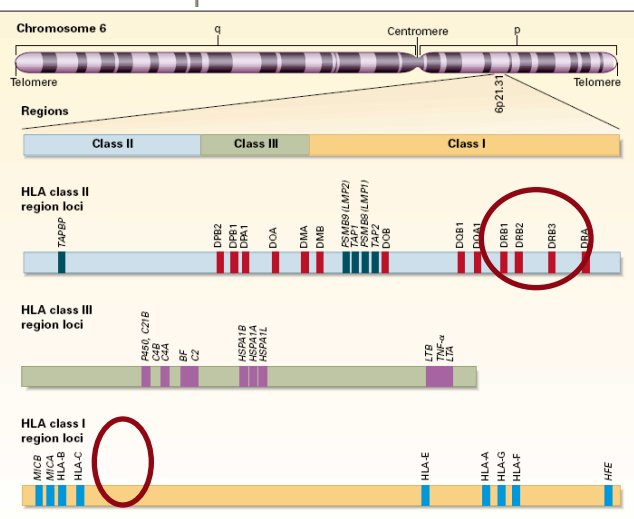
Page nr: 1 (of 51)      Next page > | Last page >>

A	B	C	DRB1	DQB1	Reg	#	DRB3/4/5	DPB1
01:01	08:01	07:01	03:01	02:01				
<b>Allele matched:</b>							<b>1258</b>	
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01 4*N*NNN 5*N*NNN	
01:01	08:01	07:01	03:01	02:01	A	2	3*01:01	
01:01	08:01	07:01	03:01	02:01	CH	1	3*01:01	
01:01	08:01	07:01	03:01	02:01	CND	1	3*01:01	04:01,04:02
01:01:01	08:01	07:01	03:01	02:01:01	D	1	3*01:01	04:01,04:02
01:01	08:01	07:01	03:01	02:01	D	1	3*01:01	04:01
01:01	08:01	07:01	03:01	02:01	D	4	3*01:01	
01:01	08:01	07:01	03:01:01	02:01	D	14	3*01:01	
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01	01:01,02:01
01:01	08:01	07:01	03:01:01	02:01	D	2	3*01:01	01:01,04:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01	04:01,05:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01	03:01,04:01
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01	
01:01	08:01	07:01	03:01:01	02:01	D	1	3*01:01	
01:01	08:01	07:01	03:01	02:01	D	10	3*01:01	
16:01:01	03:01:01	02:01	03:01:01	02:01	D	1	3*01:01	01:01:01,14:01
03:01:01	02:01:01	02:01:01	03:01:01	02:01:01	D	1	3*01:01	01:01,04:HJMR
03:01:01	02:01:01	02:01:01	03:01:01	02:01:01	D	1	3*01:01	01:01:01
16:01:01	03:01:01	02:01	03:01:01	02:01	D	1	3*01:01	04:YUT,14:YUS
03:01	02:01	02:01	03:01	02:01	D	1	3*01:01	04:01,04:02
03:01	02:01	02:01	03:01	02:01	D	1	3*01:01	02:01:02,04:01:01
03:01	02:01	02:01	03:01	02:01	D	1	3*01:01	01:01,02:01
03:01	02:01	02:01	03:01	02:01	D	1	3*01:01	01:01
03:01:01	02:01	02:01	03:01:01	02:01	D	1	3*01:01	
03:01	02:01	02:01	03:01	02:01	D	1	3*03:01	
03:01	02:01	02:01	03:01	02:01	D	1	3*01:01	
03:01	02:01	02:01	03:01	02:01	F	1	3*01:01	04:01

HR- typed

2013: 1258 donors completely typed and ready for selection and work up

Linkage disequilibrium



### BMDW Match Programs

Run Date: 2013-11-18

Welcome  
M. Emonds  
Logout

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: test20102010 Last name: test First name: test

Search determinants: **A: 1, B: 8, DR: 17,**

<< First page | < Previous page Page nr: 7 (of 51) Next page > | Last page >>

A	B	C	DRB1	DQB1	Reg	#	DRB3/4/5	DPB1
01:01	08:01	07:01	03:01	02:01				
<b>Potentially (Allele) Matched:</b>						<b>41050</b>		
01:RZUD	08:XKT	07:JECH	03:01:01	02:01:01	D	1		03:FNVX
01:RZUD	08:XKT	07:JECH	03:01:01	02:01:01	D	1		04:01:01,19:01
01:RZUD	08:XKT	07:JECH	03:01:01	02:01:01	D	1		04:01:01,05:RGPW
01:RZUD	08:XKT	07:JECH	03:01:01	02:01:01	D	1		04:02:01
01:RZUD	08:XKT	07:JECH	03:01	02:01:01	D	1		02:02,04:01
01:RZUD	08:XKT	07:JECH	03:01	02:01:01	D	1		02:01:02,19:01
01:RZUD	08:XKT	07:JECH	03:01	02:01:01	D	12		03:FNVX,04:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		03:FNVX,05:RGPW
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	5		03:FNVX,04:02
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	2		03:FNVX,09:01
01:PAUK	08:XKT	07:JECH	03:01	02:01:01	D	1		01:01:01,19:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		03:FNVX,10:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		01:01:01,19:01
01:KTKV	08:XKT	07:CVAG	03:01	02:01:01	D	1		04:FNV5,09:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		01:01:01,20:01:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		01:01:01,23:01
01:KTKV	08:XKT	07:CVAG	03:01	02:01	D	1		01:01,04:01
01:KTKV	08:XKT	07:CVAG	03:01	02:01	D	1		01:01,05:01
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	1		02:01,03:FNVX
01:KTKV	08:XKT	07:CVAG	03:01	02:01	D	2	06:02	
01:KTKV	08:XKT	07:CVAG	03:01	02:01	D	2		03:FNVX
01:RGPH	08:XKT	07:JECH	03:01	02:01:01	D	11		02:01,04:01

Multiple allele codes

IR- typed

https://www.bmdw.org/scripts/runisa.dll?RM - Windows Internet Explorer wordt aangeboden door

https://www.bmdw.org/scripts/runisa.dll?RM

Bestand Bewerken Beeld Favorieten Extra Help

Favorieten Laatste adviezen aandelen ... DNA & RNA Services EMBL... Remote access pagina

https://www.bmdw.org/scripts/runisa.dll?RM

## Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: BEUZGTEST Last name: AM First name: AM

Search determinants: **A: 7, 32 B: 44, 50 DR: 4, 7**

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A	B	C	DRB1	DQB1	Reg	#	DI
02:01	32:01	44:02 50:01	05:01 06:02	04:01 07:01	03:02	04:02	

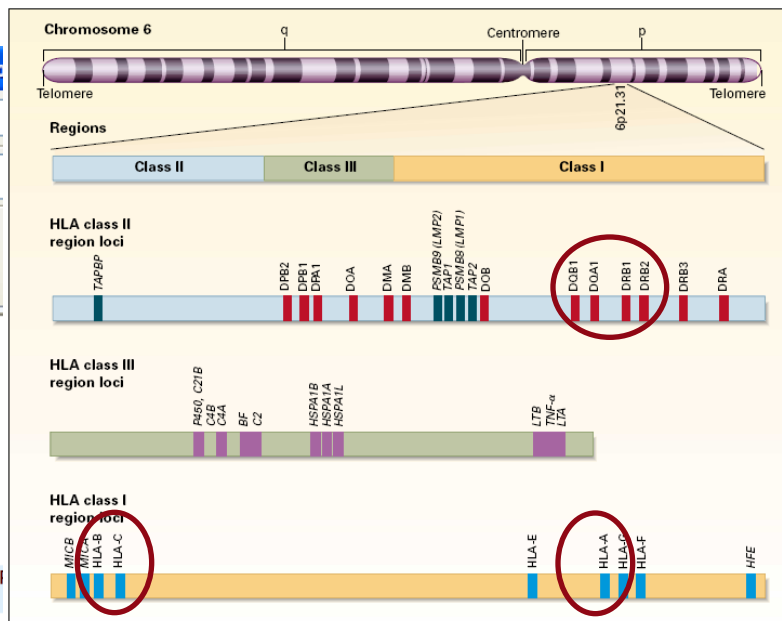
### Potentially (Allele) Matched:

										122	
02:01:01G32:01:01G44:02:01G50:01:01	05:01:01G06:02:01G04:01:01	07:01:01G02:02:01	03:01:01	D	1						
02:KNHP 32:01	44:JGMU 50:01	05:JEAU 06:JCBB 04:01	07:01	02:02	03:01	D	1				
02:GNF 32:01	44:PYV 50:01	05:AC 06:02 04:01:01	07:01:01	02:EAN	03:SNFR	D	1	4*01:XX			
02:DFKP 32:01	44:ENWF 50:01	05:EX 06:NS 04:01	07:01	02:MS	03:02						
02:01 32:01	44:02 50:01	05:01 06:02 04:01	07:XX								
02:DFKP 32:01	44:ENWF 50:01	04:FJCR 05:DMRZ 04:01:01	07:01:01	02:MS	03:EN						
02:DFKP 32:01	44:ENWF 50:01	05:EX 06:NS 04:01:01	07:01:01	02:MS	03:EN						
02:RGPK 32:01	44:JGMU 50:01	05:TMVG 06:TMVJ 04:01	07:01	02:EAN	03:SN						
02:DFKP 32:01	44:ENWF 50:01	05:EX 06:NS 04:01	07:01	02:MS	03:EN						
02:CUPK 32:AG	44:WRJ 50:01	05:EX 06:NS 04:01:01	07:01:01	02:EAN	03:RC						
02:KNHP 32:01	44:MBJP 50:AK	05:JXFW 06:JXGK 04:01	07:01	02:EAN	03:JEAU	USA1	1	4*01:XX			
02:VTCU 32:WEKB	44:WCRH 50:VXUT	05:WDFB 06:WECX 04:VYHU	07:01	02:02	03:VWZV	GB	1	4*01:TFE			
02:DFKP 32:01	44:WRJ 50:01	05:EX 06:NS 04:01:01	07:01:01		D		1	4*01:XX			
02:XX 32:XX	44:XX 50:XX	05:AC 06:02 04:01	07:01	02:MN	03:VNJ	D	1	4*01:MY			
02:XX 32:XX	44:XX 50:XX	05:AC 06:02 04:01	07:01	02:MN	03:VNJ	USA1	1	4*01:MY			
02:ANXF 32:YH	44:AGWY 50:01	05:ARSE 06:ASCZ 04:01	07:AC	02:XX	03:AD	USA1	1	4*01:GM			
02:XX 32:XX	44:XX 50:XX	05:AC 06:02 04:01	07:01	02:AB	03:PUH	USA1	1	4*01:MY			

**B\*44:02,C\*05:01 is in linkage disequilibrium**

-> many 10/10 matches

-> 1st step = CT

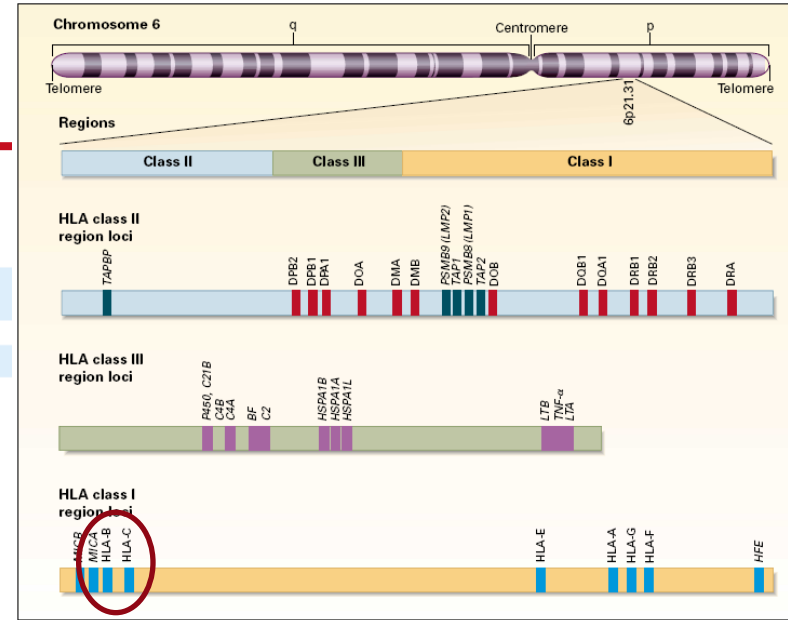




A	B	C	DRB1	DQB1	Reg	#					
02:01	32:01	44:03	50:01	05:01	06:02	04:01	07:01	03:02	04:02		

Potentially (Allele) Matched: 83

02:DFKP	32:01	44:03	50:01	04:CVAF	06:02	04:01:01	07:01:01			D	1
02:XX	32:XX	44:XX	50:XX	05:AC	06:02	04:01	07:01	02:MN	03:VNJ	D	1
02:XX	32:XX	44:XX	50:XX	05:AC	06:02	04:01	07:01	02:MN	03:VNJ	USA1	1
02:XX	32:XX	44:XX	50:XX	05:AC	06:02	04:01	07:01	02:AB	03:PUH	USA1	1
2	32	44	50			04:01	07:01	03:01	03:03	D	1
02:XX	32:XX	44:XX	50:XX	05:01	06:02	04:XX	07:01			DK	1
02:XX	32:XX	44:XX	50:XX	06:BG	16:XX	04:XX	07:XX	02:MS	03:NX	GB4	1
2	32	44	50			04:01	07:01	02:01	03:02	D	1
2	32	44	50			04:01	07:01	02:01	03:01	D	1
02:TRNH	32:TRRM	44:YCNB	50:TUHA			04:TRXP	07:MAWZ	02:CR	03:TRWK	GB3	1
02:XX	32:XX	44:XX	50:01			04:01	07:01			U	
02:XX	32:01	44	50			04:01	07:01			U	
02:XX	32:XX	44:XX	50:XX			04:01	07:01			C	
02:XX	32:XX	44:XX	50:XX			04:01:01	07:01:01			D	
2	32	44	50			04:01	07:01	02:AB	03:AD	D	
02:XX	32:01	44:XX	50:XX			04:VN	07:01			U	
2	32	44	50			04:01	07:01	02:XX	03:AD	U	
02:GKES	32:GKHP	44:GNSZ	50:FWM			04:DZTR	07:FMAN			B	
2	32	44	50			04:BMS	07:MT	02:AB	03:01	G	
02:XX	32:01	44:XX	50:XX			04:JEF	07:DWH			U	
02:GKES	32:GKHP	44:XX	50:FWM			04:DZTR	07:FMAN			B	
02:XX	32:XX	44:XX	50:XX	05:XX	06:XX	04:XX	07:XX			B	
02:FMGC	32:EKAP	44:XX	50:XX			04:DZTR	07:FMAN			BR	1
02:FMGC	32:EKAP	44:FRGR	50:XX			04:XX	07:FMAN			BR	1
02:XX	32:XX	44:XX	50:XX			04:XX	07:01			D	1
2	32	44	50			04:XX	07:01	02:XX	03:02	F	1
02:XX	32:01	44:XX	50:XX			04:XX	07:XX			GB4	1
02:XX	32:XX	44:XX	50:XX	06:XX	16:XX	04:XX	07:XX			I	1
02:XX	32:XX	44:XX	50:XX			04:JEF	07:MT			CND3	1
2	32	44	50			04:01:01	07:01:01			D	1
02:XX	32:XX	44:XX	50:XX			04:JEF	07:MT			D	1



**B\*44:03, C\*05:01 = rare HLA-B,C association**

- > no fully matched donor available
- > 1st step is HR typing requests
- > probably only 9/10 match

## Rare alleles (independent from race)

### eriging persoon:

Bepaling	HLA A	HLA B	HLA Cw	HLA DRB1	HLA DQB1
Laatste	A*31:01 A*68:01 26/05/10	B*15:17 B*51:07 26/05/10	C*07 C*14 26/05/10	DRB1*13:02 niet gedetecteerd 26/05/10	DQB1*06:04 DQB1*06:09 26/05/10
Voorlaatste	A*31(A31) A*68(A68) 09/09/08	B*15(B63) B*51(B51) 09/09/08	-	DRB1*13(DR13) niet gedetecteerd 09/09/08	-

### eriging relaties:

Relatie	Naam	HLA A	HLA B	HLA Cw	HLA DRB1	HLA DQB1
vader		A*03(A3) A*68(A68) 02/08/10	B*15(B63) B*57(B57) 02/08/10	-	DRB1*13(DR13) DRB1*15(DR15) 02/08/10	-
		-	-	-	-	-
moeder		A*02(A2) A*31(A31) 02/08/10	B*35(B35) B*51(B51) 02/08/10	-	DRB1*07(DR7) DRB1*13(DR13) 02/08/10	-
		-	-	-	-	-
broer		A*02(A2) A*03(A3) 09/09/08	B*35(B35) B*57(B57) 09/09/08	-	DRB1*07(DR7) DRB1*15(DR15) 09/09/08	-



# BMDW Match Programs

Run Date: 18-Oct-2010

## Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: test                      Last name: test                      First name:

Search determinants: **A:** 31, 68 **B:** 63, 51 **DR:** 13,

A	B	C	DRB1	DQB1	Reg	#	Additional details	
31:01	68:01	15:17	51:07	07:XX	14:02	13:02	06:04 06:09	DRB3/4/5
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>							<b>9</b>	
31:XX	68:XX	51:XX	<b>15:JUS</b>	03:04	15:BJ	13:TKS	13:TKT	USA1 1 3*02:KBM
<b>32:XX</b>	68:CTTA	51:XX	15:17			13:FKRU	13:FKRV	D 1
<b>30:01</b>	68:XX	51:AZRE	15:XX			13:XX		D 1
<b>32:XX</b>	68:XX	51:XX	15:XX	03:XX	15:XX	13:XX		N 1
<b>32:XX</b>	68:XX	51	63	07:XX	15:XX	13:XX		I 1
31	28	<b>52</b>	63			13:AB	13:KP	USA1 1 3*01:01
<b>32:XX</b>	68:XX	51:XX	15:XX			13:XX		IL2 1
31	28	51	<b>62</b>			13:JEW	13:JHN	D 1 3*02:JSU,02:KAA
31	68	5	<b>62</b>			13:XX		D 1

### Registry Code Information:

D: Germany                      N: Norway  
 I: Italy                              USA1: USA-NMDP  
 IL2: Israel-Ezer Mizion

### Multiple Allele Code Information:

AB: 01/02                              JSU: 01/02/03/06/07/09/10/11/12  
 AZRE: 51:01-51:10/51:11N/51:12-      JUS: 15:01/15:01N/15:04/15:33/15:34/15:38/15:60  
       51:24/51:26/51:27N/51:28-51:36/ 52:01-  
       52:06  
 BJ: 02/13                              KAA: 01/02/03/06/07/09/10/11/12/13

Oktober 2010

14.900.000  
 donors

Only mismatched  
 donors available

Rare alleles

## BMDW Match Programs

Run Date: 2013-11-16

Rare alleles

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: test

Last name: test

First name:

Search determinants: **A:** 31, 68 **B:** 63, 51 **DR:** 13,

A	B	C	DRB1	DQB1	Reg	#
31:01	68:01	15:17 51:07	07:XX 14:02	13:02	06:04 06:09	
<b>Potentially (Allele) Matched:</b>						<b>4</b>
31:XX	68:XX	51:XX	15:XX	13:XX	BR	4
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>						<b>19</b>
31:XX	68:XX	51:XX	<b>15:JUS</b>	03:04	15:BJ 13:TKS 13:TKT	USA1 1
31:JDZD	68:CAKR	51	<b>62</b>	03:FJUM	15:AYVB 13:JEW 13:JHN	D 1
<b>32:XX</b>	68:CTTA	51:XX	15:17		13:FKRU 13:FKRV	D 1
<b>30:01</b>	68:XX	51:AZRE	15:XX		13:XX	D 1
<b>32:XX</b>	68:XX	51:XX	15:XX	03:XX	15:XX 13:XX	N 1
<b>32:XX</b>	68:XX	51	63	07:XX	15:XX 13:XX	I 1
31	28	<b>52</b>	63		13:AB 13:KP	USA1 1
<b>33:XX</b>	68:XX	51:XX	15:XX		13:XX	BR 2
<b>32:XX</b>	68:XX	51:XX	15:XX		13:XX	BR 1
<b>29:XX</b>	68:XX	51:XX	15:XX		13:XX	BR 2
<b>30:XX</b>	68:XX	51:XX	15:XX		13:XX	BR 1
<b>74:XX</b>	68:XX	51:XX	15:XX		13:XX	BR 3
<b>32:XX</b>	68:XX	51:XX	15:XX		13:XX	IL2 1
<b>29:XX</b>	68:XX	51:XX	15:XX		13:XX	P 2
<b>HLA-DR Allele/Split Antigen Mismatched:</b>						<b>2</b>
31:XX	68:XX	51:XX	15:XX	13:XX	<b>14:XX</b>	BR 2

November 2013

> 22 000 000  
donors

4 potentially allele  
matched donors  
available

Virtually, only  
mismatched  
donors available

## BMDW Match Programs

Run Date: 2013-11-16

Rare HLA-B HLA-DR association

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: BEANSDW070740

Search determinants: **A:** 2, 11 **B:** 51, 57 **DR:** 17, 14

A	B	C	DRB1	DQB1	Reg	#	DRB3/4/5	DPB1				
02:01	11:01	51:01	57:01	01:02	06:02	03:01	14:BCAD	02:01	05:03			
<b>Potentially (Allele) Matched:</b>							<b>4</b>					
02:DFKP	11:BDFZ	51:CVAE	57:01:01	01:FNYV	06:EXRF	03:BMBB	14:DZBU	02:MS	05:03:01	B	1	
02:XX	11:XX	51:XX	57:XX			03:ENW	14:ECZ			USA1	1	3*02:BZF
02:JWRB	11:XX	51:XX	57:JZJE			03:KCFZ	14:GPKR			BR	1	
2	11	51:MDBU	57:JZJE			03:KCFZ	14:GPKR			BR	1	
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>							<b>10</b>					
02:01:01	11:01:01	51:01:01	<u>58:01:01</u>	03:02	14:02:01	03:01	14:54			CN	1	
02:DFKP	11:BDFZ	<u>51:08</u>	57:01:01	06:02	16:02	03:BMBB	14:DZBU			PL6	1	3*01:XX,02:XX
02:DFKP	11:BDFZ	51:CVAE	<u>58:VE</u>	07:CVAG		03:BMBB	14:DZBU	02:MS	05:03:01	D	1	3*02:XX
02:DFKP	11:BDFZ	51:CVAE	<u>58:VE</u>	02:02:02	03:02	03:CVT	14:BZFP			D	1	3*02:XX
02:RHCU	11:PWMU	51	<u>58</u>	03:02	15:AYVB	03:PYVG	14:PYWS	02:EAN	05:BK	USA1	1	
02:XX	11:XX	51:XX	<u>58:01</u>			03:AGZM	14:PGC			USA1	1	3*02:ADUF,02:AJTK
02:BXJY	11:BPDM	51:AFJP	<u>58:09</u>			03:AUFU	14:BYUG			BR	1	
02:XX	11:XX	51:XX	<u>58:XX</u>			03:EBUT	14:XX			TW	1	
02:XX	11:XX	<u>52:XX</u>	57:XX			03:XX	14:XX			BR	1	
02:XX	11:XX	51:XX	<u>58:XX</u>			03:XX	14:XX			P	1	
<b>HLA-DR Allele/Split Antigen Mismatched:</b>							<b>9</b>					
02:XX	11:XX	51:XX	57:XX	06:02	14:02	03:01	<u>13:01</u>	02:AB	06:03	USA1	1	3*01:GM,01:SDX
02:ANDC	11:XSH	51:AFJR	57:GW	06:AJB	15:02	03:XEV	<u>13:ASGS</u>			USA1	1	
02:JWRB	11:NVXT	51:JYXV	57:JYPZ			03:JXKA	<u>13:JXRP</u>			CND	1	
02:XX	11:XX	51:XX	57:XX			03:XX	<u>13:XX</u>			BR	4	
2	11	51:GWGR	57:EADY			03:GJRE	<u>13:DHAD</u>			BR	2	

## BMDW Match Programs

Database updated: 22-May-2007

**2007: 0** donors  
beschikbaar

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient: [REDACTED] PAN Last: [REDACTED] ERT First: [REDACTED] EM

HLA-C considered  HLA-DQ considered  Extended sorting on DRB1

A	B	C	DRB1	DQB1	Reg	#	Additional details				
0301	3201	4701	5501	03XX	06XX	0401	1501	0301	0602	DRB3/4/5	Info

NO DONORS/CBU's FOUND

# = CB registered in NetCord  
## = CB registry partly registered in NetCord

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

For your comments: [BMDW@Europdonor.NL](mailto:BMDW@Europdonor.NL) || [BMDW Homepage](#) || [Disclaimer](#)

(Time to generate Match results: 2007-05-22 14:30:43.44; CPU Time: 2007-05-22 14:30:43.44)

Rare AB - DR association. None of the alleles is extremely rare.

## BMDW Match Programs

Run Date: 18-Oct-2010

**2010: nog steeds**  
**0** donors  
beschikbaar

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: TEST20102010-2 Last name: test zzm First name: test zzm

Search determinants: **A:** 3, 32 **B:** 47, 55 **DR:** 4, 15

A	B	C	DRB1	DQB1	Reg	#	Additional details			
03:01	32:01	47:01	55:01	03:XX	06:XX	04:01	15:01	03:01	06:02	DRB3/4/5

NO DONORS FOUND

# = CB registered in NetCord  
## = CB registry partly registered in NetCord

**2013: virtually still no donors available**

## Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: TEST20102010-2

Last name: test zzm First name: test zzm

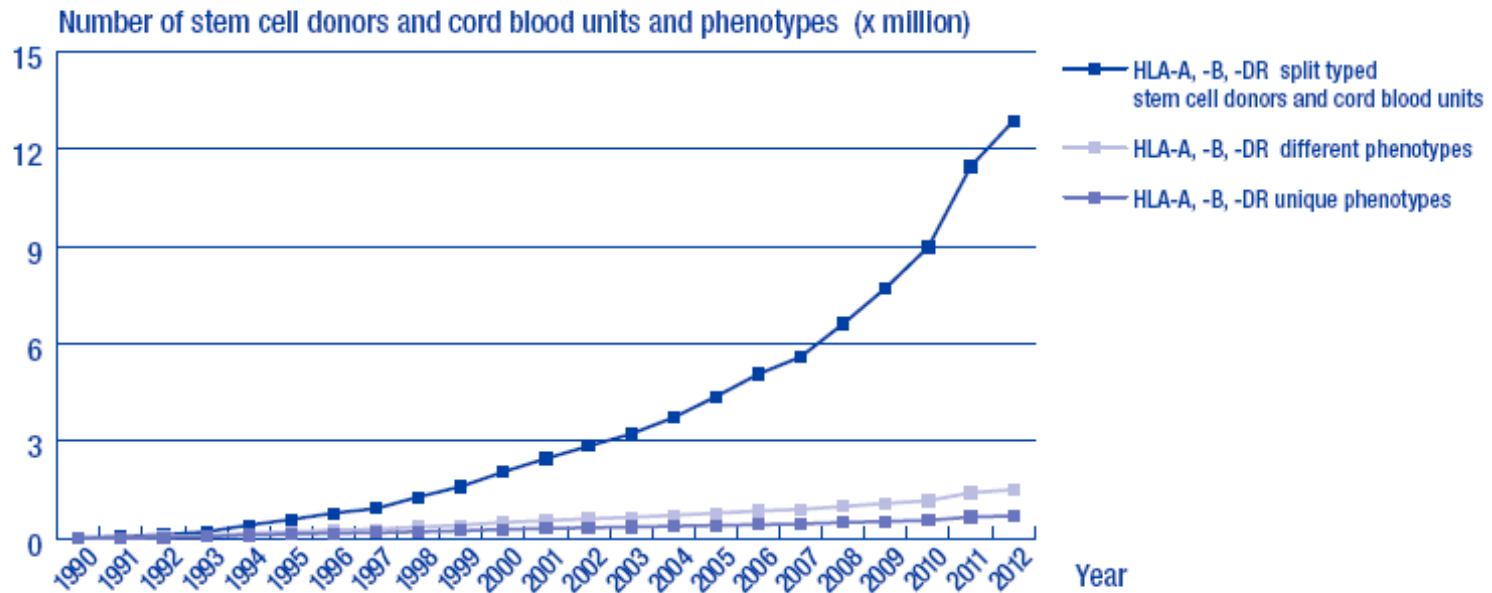
Search determinants: **A:** 3, 32 **B:** 47, 55 **DR:** 4, 15

A	B	C	DRB1	DQB1	Reg	#	DRB3/4/5
03:01	32:01	47:01 55:01	03:XX 06:XX	04:01 15:01	03:01	06:02	
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>							<b>1</b>
03:XX	<u>30:XX</u>	55:XX 47:XX	15:XX 04:XX		BR	1	
<b>HLA-DR Allele/Split Antigen Mismatched:</b>							<b>2</b>
03:DCTR	32:EATM	55:DHRD 47:01	15:DGMS	<u>04:AMCV</u>	BR	1	
03:JYYA	32:JYFA	55:KWBR 47:MR	<u>16:DCME</u>	04:DZTR	BR	1	

Rare AB - DR association. None of the alleles is extremely rare.

Figure 12  
Number of stem cell donors  
and cord blood units per year

© BMDW



## BMDW Match Programs

Run Date: 2013-11-16

Rare HLA-B HLA-DR association

### Match Results - Regular Match Program

[Back to Menu](#) | [Select different match \(options\)](#) | [Show Summary](#) | [Match on incomplete typings](#)

Recipient ID: BEANSW070740

Search determinants: **A:** 2, 11 **B:** 51, 57 **DR:** 17, 14

A	B	C	DRB1	DQB1	Reg	#	DRB3/4/5	DPB1				
02:01	11:01	51:01	57:01	01:02	06:02	03:01	14:BCAD	02:01	05:03			
<b>Potentially (Allele) Matched:</b>							<b>4</b>					
02:DFKP	11:BDFZ	51:CVAE	57:01:01	01:FNYV	06:EXRF	03:BMBB	14:DZBU	02:MS	05:03:01	B	1	
02:XX	11:XX	51:XX	57:XX			03:ENW	14:ECZ			USA1	1	3*02:BZF
02:JWRB	11:XX	51:XX	57:JZJE			03:KCFZ	14:GPKR			BR	1	
2	11	51:MDBU	57:JZJE			03:KCFZ	14:GPKR			BR	1	
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>							<b>10</b>					
02:01:01	11:01:01	51:01:01	<u>58:01:01</u>	03:02	14:02:01	03:01	14:54			CN	1	
02:DFKP	11:BDFZ	<u>51:08</u>	57:01:01	06:02	16:02	03:BMBB	14:DZBU			PL6	1	3*01:XX,02:XX
02:DFKP	11:BDFZ	51:CVAE	<u>58:VE</u>	07:CVAG		03:BMBB	14:DZBU	02:MS	05:03:01	D	1	3*02:XX
02:DFKP	11:BDFZ	51:CVAE	<u>58:VE</u>	02:02:02	03:02	03:CVT	14:BZFP			D	1	3*02:XX
02:RHCU	11:PWMU	51	<u>58</u>	03:02	15:AYVB	03:PYVG	14:PYWS	02:EAN	05:BK	USA1	1	
02:XX	11:XX	51:XX	<u>58:01</u>			03:AGZM	14:PGC			USA1	1	3*02:ADUF,02:AJTK
02:BXJY	11:BPDM	51:AFJP	<u>58:09</u>			03:AUFU	14:BYUG			BR	1	
02:XX	11:XX	51:XX	<u>58:XX</u>			03:EBUT	14:XX			TW	1	
02:XX	11:XX	<u>52:XX</u>	57:XX			03:XX	14:XX			BR	1	
02:XX	11:XX	51:XX	<u>58:XX</u>			03:XX	14:XX			P	1	
<b>HLA-DR Allele/Split Antigen Mismatched:</b>							<b>9</b>					
02:XX	11:XX	51:XX	57:XX	06:02	14:02	03:01	<u>13:01</u>	02:AB	06:03	USA1	1	3*01:GM,01:SDX
02:ANDC	11:XSH	51:AFJR	57:GW	06:AJB	15:02	03:XEV	<u>13:ASGS</u>			USA1	1	
02:JWRB	11:NVXT	51:JYXV	57:JYPZ			03:JXKA	<u>13:JXRP</u>			CND	1	
02:XX	11:XX	51:XX	57:XX			03:XX	<u>13:XX</u>			BR	4	
2	11	51:GWGR	57:EADY			03:GJRE	<u>13:DHAD</u>			BR	2	

Sorting
 Multiple Allele Codes
 Report
 Show/Hide Report Maker
 Custom Report
 Typing Request
 Sample Request
 CBU Report Request

Drag a column header here to group by that column

											TC				A	B	C	DRB1	DRB2	DRB3	DRB4	
											BETRAANS1				02:01	51:01	01:02	03:01	03:01	03:01	03:01	03:01
															11:01	57:01	06:02	14:BCAD	02:01	05:03		
Msg	Donor Updat	Validity	Record Update	HUB	ID	State	Type	Sex	DOB	Match Grade	Match h	A.1 [02:01]	A.2 [11:01]	B.1 [51:01]	B.2 [57:01]	C.1 [01:02]	C.2 [06:02]	DR.1 [03:01]	DR.2 [14:BC]	DQ.1 [02:01]	DQ.2 [05:03]	
Old	New	Latest	16/10/2013	BE	BEANT0006593	AV	MD	M	1960	4/4 AB Antigen Match	10/10	2	11	51	17							
Old	Upd	Latest	14/11/2013	BE	BEANT10004562	RS	MD	F	1977	6/6 Potential (Allele) Match	10/10	02:01	11:01	51:01	57:01	01:02	06:02	03:01	14:BCAD	02:01	05:03	
Old	New	Latest	16/10/2013	DE	DEHAN.....54359	AV	MD	F	1967	4/4 AB Antigen Match	10/10	2	11	51	57	1	6					
Old	New	Latest	16/10/2013	DE	DEDKM.....400167	AV	MD	F	1959	4/4 AB Antigen Match	10/10	2	11	51	57	1	6					
Old	New	Latest	16/10/2013	DE	DEWSZ.....38916939	AV	MD	F	1959	4/4 AB Antigen Match	10/10	2	11	51	57	1	6					
Old	New	Latest	16/10/2013	DE	DELSA.....2963710704	AV	MD	F	1955	4/4 AB Antigen Match	10/10	2	11	51	57	1	6					
Old	New	Latest	16/10/2013	DE	DEHUU.....200930776	AV	MD	F	1986	4/4 AB Antigen Match	10/10	2	11	51	57							
Old	New	Latest	16/10/2013	DE	DEMBG.....2006399	AV	MD	M	1969	4/4 AB Antigen Match	10/10	2	11	51	57							
Old	New	Latest	16/10/2013	DE	DEMAN.....15245	AV	MD	F	1968	4/4 AB Antigen Match	10/10	2	11	5	57							
Old	New	Latest	16/10/2013	DE	DEWSZ.....47671140	AV	MD	F	1968	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:TFE							
Old	New	Latest	16/10/2013	DE	DEAKB.....855543	AV	MD	F	1968	4/4 AB Antigen Match	10/10	02:PXZ	11:PXVE	51:RCDB	57:RCDU							
Old	New	Latest	16/10/2013	DE	DECOL.....18600	AV	MD	M	1967	4/4 AB Antigen Match	10/10	2	11	51	57							
Old	New	Latest	16/10/2013	DE	DEDKM.....2603643	AV	MD	M	1965	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:GW							
Old	New	Latest	16/10/2013	DE	DEDKM.....2598791	AV	MD	F	1965	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2653581	AV	MD	M	1965	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2158679	AV	MD	F	1964	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2332374	AV	MD	F	1964	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....3274287	AV	MD	F	1964	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:TFE							
Old	New	Latest	16/10/2013	DE	DEDKM.....2333464	AV	MD	F	1963	4/4 AB Antigen Match	10/10	02:XX	11:MN	51:XX	57:01							
Old	New	Latest	16/10/2013	DE	DEDKM.....2625274	AV	MD	F	1963	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....3058079	AV	MD	F	1963	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:TFE							
Old	New	Latest	16/10/2013	DE	DEHAN.....603621317	AV	MD	M	1962	4/4 AB Antigen Match	10/10	2	11	51	57							
Old	New	Latest	16/10/2013	DE	DEDKM.....834775	AV	MD	F	1962	4/4 AB Antigen Match	10/10	2	11	51	57							
Old	New	Latest	16/10/2013	DE	DEDKM.....2127981	AV	MD	F	1962	4/4 AB Antigen Match	10/10	02:XX	11:MN	51:XX	57:01							
Old	New	Latest	16/10/2013	DE	DEDKM.....2379903	AV	MD	F	1962	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....3203452	AV	MD	F	1962	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:TFE							
Old	New	Latest	16/10/2013	DE	DEDKM.....3123243	AV	MD	M	1962	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:TFE							
Old	New	Latest	16/10/2013	DE	DEDKM.....2148339	AV	MD	M	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2196181	AV	MD	F	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2268842	AV	MD	F	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:XX							
Old	New	Latest	16/10/2013	DE	DEDKM.....2484488	AV	MD	F	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:GW							
Old	New	Latest	16/10/2013	DE	DEDKM.....2599875	AV	MD	F	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:GW							
Old	New	Latest	16/10/2013	DE	DEDKM.....2663879	AV	MD	F	1961	4/4 AB Antigen Match	10/10	02:XX	11:XX	51:XX	57:GW							

Potential match = no mismatches detected, even if only LR A B or A B DR is available



Drag a column header here to group by that column

**BE79401P** **TC** **A** 01:01 **B** 08:01 **C** 07:01 **DRB1** 03:01  
**Visser Simon** **BETRAANS1** 68:01 38:01 12:03 04:05

Msg	Donor Updat	Validity	Record Update	HUB	ID	State	Type	Sex	DOB	Match Grade	Match Grade	A.1 [01:01]	A.2 [68:01]	B.1 [08:01]	B.2 [38:01]	C.1 [07:01]	C.2 [12:03]	DR.1 [03:01]	DR.2 [04:05]	DQ.1 [02:01]	DQ.2 [03:02]
Old	New	Latest	2/09/2013	US	US033516584	AV	MD	F	1963	6/6 Potential (Allele) Match	10/10	1	28	8	38			17	4		
Old	New	Latest	2/09/2013	US	US015116866	AV	MD	F	1966	6/6 Potential (Allele) Match	10/10	1	28	8	38			03:01	04:FN		
Old	New	Latest	2/09/2013	US	US019899954	AV	MD	M	1958	6/6 Potential (Allele) Match	10/10	1	28	8	38			03:AD	04:PK		
Old	New	Latest	2/09/2013	NL	NLNL10600950	AV	MD	M	1977	6/6 Potential (Allele) Match	10/10	01:BVNZ	68:AEBF	08:BRMZ	38:AF			03:01	04:XX	02:AD	03:02
New	Upd	Latest	5/09/2013	NL	NLNL00325826	TU	MD	F	1978	6/6 Potential (Allele) Match	10/10	01:XX	68:01	08:01	38:01	07:AAS	12:CF	03:MV	04:EG	02:XX	03:TF
Old	New	Latest	2/09/2013	DE	DEMBG.....2010907	AV	MD	F	1970	6/6 Potential (Allele) Match	10/10	01:XX	68:XX	08:XX	38:XX	07:XX	12:XX	03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DEAKB.....728682	AV	MD	M	1964	6/6 Potential (Allele) Match	10/10	01:CRRH	68:CRZH	08:CPVH	38:01			03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DEFFM.....80435	AV	MD	M	1983	6/6 Potential (Allele) Match	10/10	01:XX	68:XX	08:XX	38:XX			03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DEKSH.....1011866	AV	MD	F	1981	6/6 Potential (Allele) Match	10/10	1	28	8	38			03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DERKS...200004577	AV	MD	M	1977	6/6 Potential (Allele) Match	10/10	1	68	8	38	7		03:01	04:XX	02:01	03:02
Old	New	Latest	2/09/2013	DE	DEWSZ....1079217	AV	MD	M	1976	6/6 Potential (Allele) Match	10/10	1	28	8	38	7		03:01	04:XX	02:01	03:02
Old	New	Latest	2/09/2013	DE	DERKS...200014498	AV	MD	F	1974	6/6 Potential (Allele) Match	10/10	1	68	8	38	7		03:XX	04:XX	02:XX	03:XX
Old	New	Latest	2/09/2013	DE	DEVK...601101063	AV	MD	F	1970	6/6 Potential (Allele) Match	10/10	1	28	8	38	7		03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DEKSH.....1009334	AV	MD	M	1959	6/6 Potential (Allele) Match	10/10	1	28	8	38			03:XX	04:XX		
Old	New	Latest	2/09/2013	DE	DEDUS.....76705	AV	MD	M	1957	6/6 Potential (Allele) Match	10/10	1	28	8	38			03:01	04:XX	02:XX	03:NZY
Old	New	Latest	2/09/2013	DE	DERKS...200014284	AV	MD	M	1957	6/6 Potential (Allele) Match	10/10	1	68	8	38	7		03:XX	04:XX	02:XX	03:XX
Old	New	Latest	2/09/2013	DE	DEFFM.....68260	AV	MD	M	1954	6/6 Potential (Allele) Match	10/10	01:XX	68:XX	08:XX	38:XX			03:XX	04:XX		
New	Upd	Latest	11/11/2013	US	US130953375	AV	MD	M	1987	6/6 Allele Match	10/10	01:01	68:01	08:01	38:01	07:WTR	12:03	03:01	04:05	02:01	03:02
New	Upd	Latest	11/11/2013	US	US091275255	AV	MD	M	1982	6/6 Allele Match	10/10	01:01	68:01	08:01	38:01	07:WTR	12:03	03:01	04:05	02:01	03:02
Old	New	Latest	1/09/2013	BE	BEKUL10205	AV	MD	F	1955	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US039345111	AV	MD	F	1976	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US002204196	AV	MD	F	1966	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US002322634	AV	MD	F	1968	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US018621235	AV	MD	M	1966	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US026229211	AV	MD	F	1965	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US012619763	AV	MD	F	1962	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US013147608	AV	MD	F	1959	4/4 AB Antigen Match	10/10	1	68	8	38						
Old	New	Latest	2/09/2013	US	US026361386	AV	MD	M	1976	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US032994691	AV	MD	F	1977	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US002692226	AV	MD	M	1966	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US003041027	AV	MD	M	1965	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US003137650	AV	MD	M	1966	4/4 AB Antigen Match	10/10	1	28	8	38						
Old	New	Latest	2/09/2013	US	US003450798	AV	MD	M	1969	4/4 AB Antigen Match	10/10	1	28	8	38						

(Match Grade = 10)



Sorting
 Multiple Allele Codes
 Report
 Show/Hide Report Maker
 Custom Report
 Typing Request
 Sample Request
 CBU Report Request

Drag a column header here to group by that column

											BE79401P Visser Simon		TC BETRAANS1				A 01:01 68:01	B 08:01 38:01	C 07:01 12:03	DRB1 03:01 04:05	DQB1 02:01 03:02
Msg	Donor Update	Validity	Record Update	HUB	ID	State	Type	Sex	DOB	Match Grade	Match Grade	A.1 [01:01]	A.2 [68:01]	B.1 [08:01]	B.2 [38:01]	C.1 [07:01]	C.2 [12:03]	DR.1 [03:01]	DR.2 [04:05]	DQ.1 [02:01]	DQ.2 [03:02]
Old	New	Latest	2/09/2013	US	US098874308	AV	MD	F	1978	6/6 Antig.Match - Allele MM	9/10	01:EJSW	68:CAKR	08:XKT	38:BPSA			03:01	04:01		
Old	New	Latest	2/09/2013	US	US020630174	AV	MD	F	1965	6/6 Antig.Match - Allele MM	9/10	1	28	8	38			03:YH	04:YK		
Old	New	Latest	2/09/2013	US	US023283815	AV	MD	M	1977	6/6 Antig.Match - Allele MM	9/10	1	68	8	38			03:01	04:BK		
Old	New	Latest	2/09/2013	US	US997510244	AV	CB	F	2002	6/6 Antig.Match - Allele MM	9/10	01:CRY	68:01	08:XKT	38:01	07:WTR	12:03	03:01	04:01	02:01	03:02
Old	New	Latest	2/09/2013	DE	DESMS.....497830	AV	MD	M	1991	6/6 Antig.Match - Allele MM	9/10	01:01	68:01	08:01	38:01	07:WTR	12:03	03:01	04:02	02:01	03:02
Old	New	Latest	2/09/2013	DE	DEDKM.....5281576	AV	MD	M	1988	6/6 Antig.Match - Allele MM	9/10	01:KTMC	68:CAKR	08:XKT	38:01	07:JAUP	12:CNB	03:AUCN	04:02	02:01:01	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....6213588	AV	MD	F	1988	6/6 Antig.Match - Allele MM	9/10	01:TFDY	68:RDZA	08:XKT	38:01	07:JECH	12:CNB	03:01	04:02	02:01:01	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....5924542	AV	MD	M	1969	6/6 Antig.Match - Allele MM	9/10	01:RDSU	68:RDZA	08:XKT	38:01	07:JECH	12:CNB	03:NFTN	04:02	02:01:01	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....6457095	AV	MD	F	1965	6/6 Antig.Match - Allele MM	9/10	01:01:01	68:01:02	08:01:01	38:01:01	07:01:01	12:03:01	03:01:01	04:02:0	02:01:01	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....5543954	AV	MD	F	1993	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....5129242	AV	MD	F	1991	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....5474510	AV	MD	M	1989	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEVKS.....601111160	AV	MD	M	1987	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....3176740	AV	MD	F	1986	6/6 Antig.Match - Allele MM	9/10	01:BYSG	68:GJF	08:XKT	38:01	07:WTR	12:03:01	03:01:01	04:02		
Old	New	Latest	2/09/2013	DE	DEDKM.....6279742	AV	MD	M	1985	6/6 Antig.Match - Allele MM	9/10	01:KNHV	68:CAKR	08:XKT	38:01:01	07:JUEP	12:GMA	03:01	04:02:0	02:EAN	03:RCH
Old	New	Latest	2/09/2013	DE	DEPLDKM-324736	AV	MD	F	1985	6/6 Antig.Match - Allele MM	9/10	01:KTKP	68:01	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....4008023	AV	MD	M	1984	6/6 Antig.Match - Allele MM	9/10	01:DUHE	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:EAN	03:RCH
Old	Upd	Latest	13/09/2013	DE	DEDKM.....3947952	AV	MD	F	1983	6/6 Antig.Match - Allele MM	9/10	01:DUHE	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:EAN	03:RCH
Old	New	Latest	2/09/2013	DE	DEDKM.....4247520	AV	MD	M	1983	6/6 Antig.Match - Allele MM	9/10	01:DUHE	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DERKS.....900115133	AV	MD	F	1982	6/6 Antig.Match - Allele MM	9/10	01:01	68:01	08:01	38:01	07:01	12:03	03:01	04:02		
Old	New	Latest	2/09/2013	DE	DEDKM.....2889576	AV	MD	F	1980	6/6 Antig.Match - Allele MM	9/10	01:CPZT	68:CCXJ	08:XKT	38:01:01	07:APAW	12:BCK	03:01:01	04:02		
Old	New	Latest	2/09/2013	DE	DEDKM.....5256192	AV	MD	M	1976	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....2837855	AV	MD	F	1975	6/6 Antig.Match - Allele MM	9/10	01:TUS	68:AZW	08:XX	38:AF			03:01:01	04:02		
Old	New	Latest	2/09/2013	DE	DEDKM.....6046494	AV	MD	F	1974	6/6 Antig.Match - Allele MM	9/10	01:KNHV	68:CAKR	08:XKT	38:01:01	07:JUEP	12:GMA	03:01	04:02:0	02:EAN	03:RCH
Old	New	Latest	2/09/2013	DE	DEVKS.....601118204	AV	MD	M	1973	6/6 Antig.Match - Allele MM	9/10	01:KNHV	68:CAKR	08:XKT	38:01:01	07:JUEP	12:GMA	03:01	04:02:0	02:EAN	03:RCH
Old	New	Latest	2/09/2013	DE	DEVKS.....601109907	AV	MD	M	1972	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEPLDKM-475273	AV	MD	M	1971	6/6 Antig.Match - Allele MM	9/10	01:KNHV	68:CAKR	08:XKT	38:01:01	07:JUEP	12:GMA	03:01	04:01:0	02:EAN	03:RCH
Old	New	Latest	2/09/2013	DE	DEDKM.....5147520	AV	MD	F	1968	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:01:0	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEAKB.....158355	AV	MD	F	1966	6/6 Antig.Match - Allele MM	9/10	01:PYXR	68:PZCK	08:PYKF	38:PYPB	07:KFew	12:KFdn	03:PYVF	04:02	02:01	03:SFY
Old	New	Latest	2/09/2013	DE	DEDKM.....3354864	AV	MD	M	1966	6/6 Antig.Match - Allele MM	9/10	01:BYSG	68:GJF	08:XKT	38:01	07:WTR	12:03:01	03:01:01	04:02		
Old	New	Latest	2/09/2013	DE	DEDKM.....3909163	AV	MD	M	1965	6/6 Antig.Match - Allele MM	9/10	01:DUHE	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:01:0		
Old	New	Latest	2/09/2013	DE	DEDKM.....5253759	AV	MD	F	1958	6/6 Antig.Match - Allele MM	9/10	01:KTEM	68:DGG	08:XKT	38:01:01	07:CVKN	12:BCK	03:01:01	04:02	02:MS	03:02:01
Old	New	Latest	2/09/2013	DE	DEDKM.....83207	AV	MD	F	1973	6/6 Antig.Match - Allele MM	9/10	1	28	8	38			03:JED	04:BK		

 ((Match Grade = 10) or (Match Grade = 9))

Customize...

Suppose that 0 MM donor is not available; is DRB1 mismatch accepted?

Drag a column header here to group by that column

TC A 26:01 B 55:01 C 03:03 DRB1 11:01 DQB1 03:01  
 BETAANS1 33:03 58:01 03:02 13:02 06:09

Msg	Donor Updat	Validity	Record Update	HUB	ID	State	Type	Sex	DOB	Match Grade	Match Grade	A.1 [26:01]	A.2 [33:03]	B.1 [55:01]	B.2 [58:01]	C.1 [03:03]	C.2 [03:02]	DR.1 [11:01]	DR.2 [13:02]	DQ.1 [03:01]	DQ.2 [06:09]
New	Upd	Latest	16/11/2013	DE	DEDKM.....5552696	RS	MD	F	1971	6/6 Potential (Allele) Match	10/10	26:JCKB	33:KNHH	55:01	58:PCSA	03:FJUM	03:02	11:KNBT	13:02	03:01	06:09
Old	New	Latest	13/11/2013	DE	DEDKM.....2456105	AV	MD	M	1973	6/6 Potential (Allele) Match	10/10	26:KXM	33:DWH	55:XX	58:AD			11:BBMH	13:AP5w		
Old	New	Latest	13/11/2013	DE	DEMBG.....1008481	AV	MD	F	1974	6/6 Potential (Allele) Match	10/10	26:XX	33:XX	55:XX	58:XX	03:XX		11:XX	13:XX		
Old	New	Latest	13/11/2013	DE	DEDKM.....4313800	AV	MD	F	1991	6/6 Potential (Allele) Match	9/10	26:GAX	33:BEKE	55:01	58:VE	01:02	03:02	11:01:01	13:02:01		
Old	New	Latest	13/11/2013	FR	FRFP007489	AV	MD	M	1962	6/6 Potential (Allele) Match	10/10	26	33	55	58			11:XX	13:XX	03:XX	06:XX
Old	New	Latest	13/11/2013	DE	DEDKM.....4328705	AV	MD	M	1967	6/6 Antig.Match - Allele MM	9/10	26:GAX	33:FEAM	55:01	58:VE	03:BPSK	03:02	11:04:0	13:02:01	03:ENWf	06:09
Old	New	Latest	13/11/2013	DE	DEDKM.....3057856	AV	MD	F	1980	6/6 Antig.Match - Allele MM	9/10	26:GAX	33:03:01	55:01	58:VE	03:BPSK	03:02	11:UPH	13:ANK		
Old	New	Latest	13/11/2013	DE	DEDKM.....2912081	AV	MD	F	1978	6/6 Antig.Match - Allele MM	9/10	26:KXM	33:DWH	55:ARJG	58:AD			11:03	13:02		
Old	New	Latest	13/11/2013	DE	DEDKM.....3009546	AV	MD	F	1960	6/6 Antig.Match - Allele MM	9/10	26:BWM	33:DWH	55:XX	58:AD			11:03	13:02		
Old	New	Latest	13/11/2013	DE	DEDKM.....3847151	AV	MD	M	1959	6/6 Antig.Match - Allele MM	9/10	26:GAX	33:BEKE	55:01	58:VE	03:BPSK	03:02	11:03	13:02:01		
Old	New	Latest	13/11/2013	DE	DEMAN.....11538	AV	MD	F	1971	6/6 Antig.Match - Allele MM	9/10	26:01	33:03	55:01	58:01	03:03	03:02	11:01	13:03		
Old	New	Latest	13/11/2013	DE	DEDKM.....6315458	AV	MD	M	1964	5/6 Antigen Match	9/10	01:RGP	33:KNHH	55:01	58:PCSA	03:VUSX	03:TEXA	11:CTPB	13:02	03:01	06:09
Old	New	Latest	13/11/2013	DE	DEPLDKM-42145	AV	MD	M	1984	5/6 Antigen Match	9/10	26:GAX	33:FEAM	55:01	58:VE	03:BPSK	03:02	10:01:0	13:02:01		
Old	New	Latest	13/11/2013	DE	DEDKM.....2778184	AV	MD	F	1979	5/6 Antigen Match	9/10	01:WUS	33:DWH	55:ARJG	58:AD			11:CTPB	13:02		
Old	New	Latest	13/11/2013	DE	DEHAN.....196416	AV	MD	F	1965	5/6 Antigen Match	9/10	26:XX	66:XX	55:XX	58:XX			11:DFYK	13:CAxA		
Old	New	Latest	13/11/2013	DE	DEULM.....70789	AV	MD	M	1960	5/6 Antigen Match	9/10	26:01	24:02	55:01	58:01	03:03	03:02	11:01	13:02		
Old	New	Latest	13/11/2013	DE	DEULM.....70723	AV	MD	M	1955	5/6 Antigen Match	9/10	26:01	24:02	55:01	58:01	03:03	03:02	11:01	13:02		
Old	New	Latest	13/11/2013	DE	DEDUS.....104878	AV	MD	F	1966	5/6 Antigen Match	9/10	1	33	55	58			11:XX	13:XX	03:XX	06:XX
Old	New	Latest	13/11/2013	DE	DEFFM.....87480	AV	MD	M	1955	5/6 Antigen Match	9/10	26:01	33:AC	15:01	58:01			11:01	13:02		
Old	New	Latest	13/11/2013	DE	DEHAN.....369316	AV	MD	M	1989	5/6 Antigen Match	9/10	24:D6JI	33:CVPU	55:DHRC	58:CCVS			11:DFYK	13:CAxA		
Old	New	Latest	13/11/2013	DE	DEDKM.....2795161	AV	MD	F	1975	5/6 Antigen Match	9/10	24:AZW	33:DWH	55:ARJG	58:AD			11:BBMH	13:AP5w		
Old	New	Latest	13/11/2013	DE	DEDKM.....873649	AV	MD	F	1963	5/6 Antigen Match	9/10	2	33	55	58			11:XX	13:XX		
Old	New	Latest	13/11/2013	DE	DEDKM.....3550915	AV	MD	F	1968	5/6 Antigen Match	9/10	26:GAX	33:03:01	55:01	58:VE	03:BPSK	03:02	11:CVDZ	14:CVEj		
Old	New	Latest	13/11/2013	DE	DEAKB.....990988	AV	MD	M	1968	5/6 Antigen Match	9/10	26:01:01i	33:03:01i	55:01:01i	58:01:01i			07:01:0	13:02:01		
Old	New	Latest	13/11/2013	DE	DEDKM.....2371756	AV	MD	M	1965	5/6 Antigen Match	9/10	26:XX	33:XX	55:XX	58:XX			11:01	09:01		
Old	New	Latest	13/11/2013	DE	DEWUE.....17105	AV	MD	F	1990	5/6 Antigen Match	9/10	26:XX	33:XX	35:XX	58:XX			11:01	13:02		
Old	New	Latest	13/11/2013	DE	DESMS.....527066	AV	MD	M	1986	5/6 Antigen Match	9/10	26:01	33:03	40:01	58:01			11:01	13:02		
Old	New	Latest	13/11/2013	DE	DEDKM.....2518009	AV	MD	M	1979	5/6 Antigen Match	9/10	26:KXM	33:CF	07:XX	58:01			11:ARZK	13:BMM		
Old	New	Latest	13/11/2013	DE	DEDKM.....2717905	AV	MD	F	1959	5/6 Antigen Match	9/10	26:KXM	33:DWH	51:XX	58:XX			11:01	13:02		
Old	New	Latest	13/11/2013	DE	DEDKM.....2638865	AV	MD	M	1956	5/6 Antigen Match	9/10	26:XX	33:XX	35:XX	58:01			11:BBMH	13:AP5w		
Old	New	Latest	13/11/2013	DE	DEAKB.....728053	AV	MD	M	1985	5/6 Antigen Match	9/10	26:CFXP	33:CNY	55:ANDE	58:UTW			11:01P	03:01P		
Old	New	Latest	13/11/2013	DE	DEWSZ.....1098630	AV	MD	M	1984	5/6 Antigen Match	9/10	26:XX	33:XX	39:XX	58:XX			11:01	13:02	03:01	06:XX
Old	New	Latest	13/11/2013	DE	DEBBB.....19924	AV	MD	F	1983	5/6 Antigen Match	9/10	26:XX	33:XX	18:XX	58:XX			11:XX	13:XX		

((Match Grade = 6/6 Potential (Allele) Match) or (Match Grade = 6/6 Antig.Match - Allele MM) or (Match Grade = 5/6 Antigen Match)) and ((Match Grade = 10) or (Match Grade = 9))

Customize...

Navigation icons: Home, Back, Forward, Stop, Refresh, Print, etc.

Filter

5/6 Antigen Match

Count: 36

Drag a column header here to group by that column											BEKULAA210785		TC		A 03:01		B 35:08		C 01:02		DRB1 11:03		DQB1 03:01	
											BETRAANS1		24:02:0*		55:01		04:JKTL		13:01		06:03			
Msg	Donor Updat	Validity	Record Update	HUB	ID	State	Type	Sex	DOB	Match Grade	Match	A.1 [03:01]	A.2 [24:02:02]	B.1 [35:08]	B.2 [55:01]	C.1 [01:02]	C.2 [04:JKT]	DR.1 [11:03]	DR.2 [13:01]	DQ.1 [03:01]	DQ.2 [06:03]			
Old	New	Latest	3/04/2013	BE	BEANT0000137	AV	MD	M	1959	5/6 Antigen Match	9/10	3	9	35	44			11	6	3	1			
Old	New	Latest	3/04/2013	BE	BEANT0000371	AV	MD	M	1959	5/6 Antigen Match	9/10	3	9	7	22			11	6	3	1			
Old	Dupl	Latest	8/10/2013	BE	BEANT0004698	AV	MD	F	1955	6/6 Antig. Match - Allele MM	9/10	3	9	35	22			11:MS	13:XJ					
Old	New	Latest	3/04/2013	BE	BEANT0005132	AV	MD	F	1955	5/6 Antigen Match	9/10	3	24	35	22			11:GX	01:AD					
Old	New	Latest	3/04/2013	BE	BEANT0005618	AV	MD	M	1971	5/6 Antigen Match	9/10	3	24	35	7			11	13					
Old	New	Latest	3/04/2013	BE	BEANT0007108	AV	MD	M	1964	5/6 Antigen Match	9/10	3	24	35	22			01:AD	13:XJ					
Old	New	Latest	3/04/2013	BE	BEBT000069806	AV	MD	M	1971	5/6 Antigen Match	9/10	3	24	35	55			01:XX	13:XX					
Old	New	Latest	3/04/2013	BE	BEKUL11314	AV	MD	M	1970	5/6 Antigen Match	9/10	3	24	35	27	1	4	11	13	7	6			
Old	New	Latest	3/04/2013	BE	BEKUL18228	AV	MD	M	1962	5/6 Antigen Match	9/10	3	24	35	51	1		11	13	7	6			
Old	New	Latest	3/04/2013	BE	BEULCL0320636	AV	MD	M	1971	5/6 Antigen Match	9/10	3	24	35	62			11:03	13:01	7	1			
Old	New	Latest	3/04/2013	BE	BEULBCM003762	AV	MD	F	1966	5/6 Antigen Match	9/10	11	24	35	55			11:XX	13:XX	7	6			
Old	New	Latest	3/04/2013	BE	BEULBDV005492	AV	MD	F	1975	5/6 Antigen Match	9/10	3	24	35	49			11:XX	13:XX					
Old	New	Latest	3/04/2013	BE	BEULBV003872	AV	MD	F	1957	5/6 Antigen Match	9/10	3	24	35	7			11	6	7	1			
Old	New	Latest	3/04/2013	BE	BEVUB00000692	AV	MD	M	1963	5/6 Antigen Match	9/10	3	24	35	7	4	1	11:XX	13:XX					
Old	New	Latest	3/04/2013	BE	BECB030008001882	AV	CB	F	2008	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	55:XX			16:XX	13:XX					
Old	New	Latest	3/04/2013	BE	BECB030009000954	AV	CB	F	2009	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	55:XX			11:XX	04:XX					
Old	New	Latest	3/04/2013	BE	BECB030010001768	AV	CB	F	2010	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	15:XX			11:XX	13:XX					
Old	New	Latest	3/04/2013	BE	BECBLVCB002095	AV	CB	F	2001	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	55:XX			01:MV	13:GVA					
Old	New	Latest	3/04/2013	BE	BECBLVCB002411	AV	CB	F	2001	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	55:XX			14:MX	13:GVA					
Old	New	Latest	3/04/2013	BE	BECBLVCB012158	AV	CB	F	2012	5/6 Antigen Match	9/10	03:XX	24:XX	35:XX	55:XX			15:AB	13:AB					

Report maker

What was found? many 9/10 potential matches; C & DQ and/or DRB1& DQ not typed yet

C & DQ: it depends on HLA type of the patient if donor with minimal 9/10 match will be found

Transplant center decided to proceed with Haplo/cord transplantation

Frequently encountered problems:

- An HR HLA-DRB1 2nd field mismatch can result in an additional HLA-DQ mismatch
- An HR HLA-B 2nd field mismatch will often result in an additional HLA-C mismatch
- HLA-B C linkage is less strong than an HLA-DRB1/DQB1 linkage (often 9/10 match due to HLA-C mismatch)

- Consider HLA-DQ when grading match results \*
- Extended sorting on locus \*\*  HLA-A  HLA-B  HLA-DRB1  None
- Sort cord blood units on TNC within each match category \*\*\*
- Include additional data in the match results
- Include 2 and 3 NIMA in match\*\*\*\*

\* If the recipient is not typed for HLA-C or HLA-DQ, then enabling these preferences do not effect the search process.

\*\* Sorts donors and cords blood units with high-resolution DNA to the top of the match category they are in.

\*\*\* Only applies to the cord blood match. With this option enabled HLA of the cord blood units is not included in the sorting within each match category.

\*\*\*\* Only applies to the NIMA match. With this option enabled cord blood units with 2 or 3 NIMA's are also used.

**!** Important notice: the regular match program and the mismatch program provide results upto 1 antigen/allele mismatch (6/6 and 5/6 matches). When the options to consider HLA-C and HLA-DQ are used, a donor or CBU with one mismatch on HLA-A, -B, or -DRB1, and an additional mismatch on HLA-C or -DQ results in the donor or CBU no longer being shown on the search report, due to this second mismatch. See the user guide for more details.

### Options for this matchrun

Do NOT paginate the output

### Select the type of match to run

- Regular Match Program
- Mismatch on HLA-A
- Mismatch on HLA-B
- Mismatch on HLA-DR
- CBU Match Program:
  - Identical & 1 antigen/allele mismatch
  - 2 antigen/allele mismatches
- NIMA Match Program:
  - Identical Matches

Search

Search determinants: **A:** 3, 24 **B:** 35, 55 **DR:** 11, 13

■ Extended sorting on DRB1 ■ Only identical and 1 allele/antigen mismatch ■ Sorted on TNC

A	B	C	DRB1	DQB1	Reg	#	Additional details	TNC	Vol.	CD34+MN				
03:01	24:02:01:02L35:08	55:01	01:02	04:JKTU	11:03	13:01	03:01 06:03	(10 <sup>7</sup> )	(ml)	(10 <sup>6</sup> ) (10 <sup>7</sup> )				
<b>Potentially (Allele) Matched:</b>							<b>1</b>							
03:XX	24:XX	55:XX	35:XX		11:XX	13:XX	ATCB	M0005 11 031962	104	19 2.7				
<b>HLA-A or -B Allele/Split Antigen Mismatched:</b>							<b>1</b>							
3	24	<u>56</u>	35		11:XX	13:XX	DUCB	DUCB02627	92	24				
<b>HLA-DR Allele/Split Antigen Mismatched:</b>							<b>4</b>							
03:XX	24:XX	55:XX	35:XX	01:XX	04:XX	11:XX	<u>14:XX</u>	03:XX	05:XX	NICB	CY1129954D	185	120	2.7
03:XX	24:XX	55:XX	35:XX			<u>11:01</u>	13:01			ECB	SPUCBAR0048259	137		2
03:DGBS	<u>24:DGBT</u>	55:SMK	35:BZVK	01:02	04:BSUG	<u>11:JECW</u>	13:MTWH			FCB	59126070925	106	68	8.2

■ Extended sorting on DRB1 ■ Only 2 allele/antigen mismatches ■ Sorted on TNC

Page nr: 1 (of 17)      Next page > | Last page >>

A	B	C	DRB1	DQB1	Reg	#	Additional details	TNC	Vol.	CD34+MN				
03:01	24:02:01:02L35:08	55:01	01:02	04:JKTU	11:03	13:01	03:01 06:03	(10 <sup>7</sup> )	(ml)	(10 <sup>6</sup> ) (10 <sup>7</sup> )				
<b>Two Allele/Antigen Mismatched:</b>							<b>1675</b>							
03:XKS	<u>24:02</u>	<u>15:GYF</u>	<u>35:14</u>		<u>16:02</u>	13:01	ACCB	6507037	361	144 11				
03:01	<u>24:02</u>	<u>35:01</u>	<u>35:14</u>		<u>16:02</u>	13:01	NYCB	901361	346	212 23.2				
<u>02:XX</u>	03:XX	55:XX	35:XX		<u>01:XX</u>	13:XX	BCB	BECB014611060080	293	134				
03:XX	24:XX	<u>15:XX</u>	35:XX		13:01	<u>14:BCAD</u>	BCB	BECBLVCB009704	292	191 90				
03:KAKM	<u>24:KAKN</u>	<u>38:01</u>	<u>35:01</u>		13:01	<u>13:03</u>	SRCB	700040001332300	282	123 23.4				
03:01	<u>24:02</u>	<u>15:01</u>	<u>35:03</u>	04:JERF	03:BPSK	13:MJMR	<u>04:03</u>	03:02	06:03	U1CB	989839551	274	96	
03:01:01G	<u>24:02:01G</u>	<u>38:01</u>	<u>35:01:01G</u>	04:XX	12:XX	<u>01:01</u>	13:01	05:01		SRCB	700040000884200	268	179	3.6
03:REYJ	<u>24:ETFC</u>	<u>50:KEBX</u>	<u>35:RCRU</u>	04:RCEK	06:RCEN	<u>04:AAHZ</u>	13:PYWK			FCB	0000008099R	265	161	7.4
<u>02:CGAE</u>	03:EKGN	<u>14:01</u>	<u>35:ENSJ</u>		11:03	13:01	ACCB	6541329	265	125 10.1				
03:01	—	55:01	<u>35:03</u>		13:01	<u>14:54</u>	ICB	05PDCB10507	257					
03:01	<u>24:02</u>	<u>38:01</u>	<u>35:01</u>	04:01	12:03	<u>15:01</u>	13:01			ECB	SPUCBAR0040938	256		18
03:XX	—	<u>07:XX</u>	35:XX		11:XX	13:XX	BCB	BECB030010001058	255	89				
03:XKS	<u>24:WYU</u>	<u>44:AMUT</u>	<u>35:TDS</u>	05:01	04:CXBM	<u>11:01</u>	13:01	03:01	06:03	U1CB	996202405	252	136	
<u>24:ENXY</u>	<u>11:ENTP</u>	55:ABSC	35:08	12:AUCW	03:WZTV	13:01	<u>07:01</u>			U1CB	992062332	248	88	
03:XX	<u>66:XX</u>	<u>58:XX</u>	35:XX		11:XX	13:XX	W3CB	1390	243	93				
03:XX	<u>30:XX</u>	<u>18:XX</u>	35:XX		11:XX	13:XX	ILCB	260157	237	25				



# Take home message

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- ✓ > 95 % chance to find a 10/10 HR match
  - ✓ Many donors available
  - ✓ Other markers than HLA can be taken into account (ABO/Sex/CMV)
- ✓ < 5 % chance to find a 10/10 or 9/10 match
  - ✓ Alternative donor (on request of the transplant physician)
    - ✓ (Haplo / CB / MM)
- ✓ **Intermediate Chance:**
  - ✓ Search for 3 months, ask for HR typings and inform clinician on the status (this group becomes smaller as more donors are available & high resolution typed). Try to make a prediction based on linkage disequilibrium & frequency data.

## Take home message

- ✓ A real 10/10 match = a 10/10 allelic (2<sup>nd</sup> Field) match
  - ✓ highly polymorphic alleles (e.g. HLA-B44) if only 1st field results in query (e.g. HLA-B\*44:XX) -> HR typing required to decide
  - ✓ Very low polymorphic alleles (e.g. HLA-B8, HLA-DR7) if only 1st field in query (e.g. HLA-B\*08:XX) -> HR typing not required to decide
- ✓ Allelic mismatches (2<sup>nd</sup> field) are preferred to antigenic mismatches (1st field)
- ✓ Before recruiting a donor, the HLA typing has to be confirmed in the HLA lab of the transplantcenter



