HLA Search Strategy
Just the Basics

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Disclosures

The following faculty and planning committee staff have no financial disclosures:

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Learning objectives

At the conclusion of this session, attendees will be able to:

- Develop skills for using non-HLA criteria to select optimal donors in productive searches
- Analyze HLA typing to identify potential barriers when selecting donors
- Explain the importance of ethnic background and how it impacts Haplogic matching predictions and donor selection

Things to ponder

- What are your HLA/typing difficulties when selecting donors?

Entering Patient Information

337-230-0 COUNCIL, MEETING
Local ID:
Center: 500
Race(Eth): White - Unspecified ()

Weight: 60kg
Age: 29
Sex: F

CMV: Negative
Disease: SCA
ABO: O-

NON-HLA

Status	Phenotype	A	B	C	DRB1	DQB1	DRB3	DRB4	DRB5	DPB1
PRLM	Pheno 1 ▼	01:01	07:02	07:01	04:01	03:01				02:01
		02:01	08:01	07:02	04:01	03:01				04:01

HLA

Running your search

Importance of re-running a search

	Prelim Search	Frequency of update
NMDP list	✓	Static until Formalization; then constantly updating
BMDW list	✓	Monthly (requires rerun of search)
Coop list	✓	One time

Preliminary Search

Last contact date (pre-search)

Updated donor HLA typing

New potential donor added

Formal Search

View/print Search Results
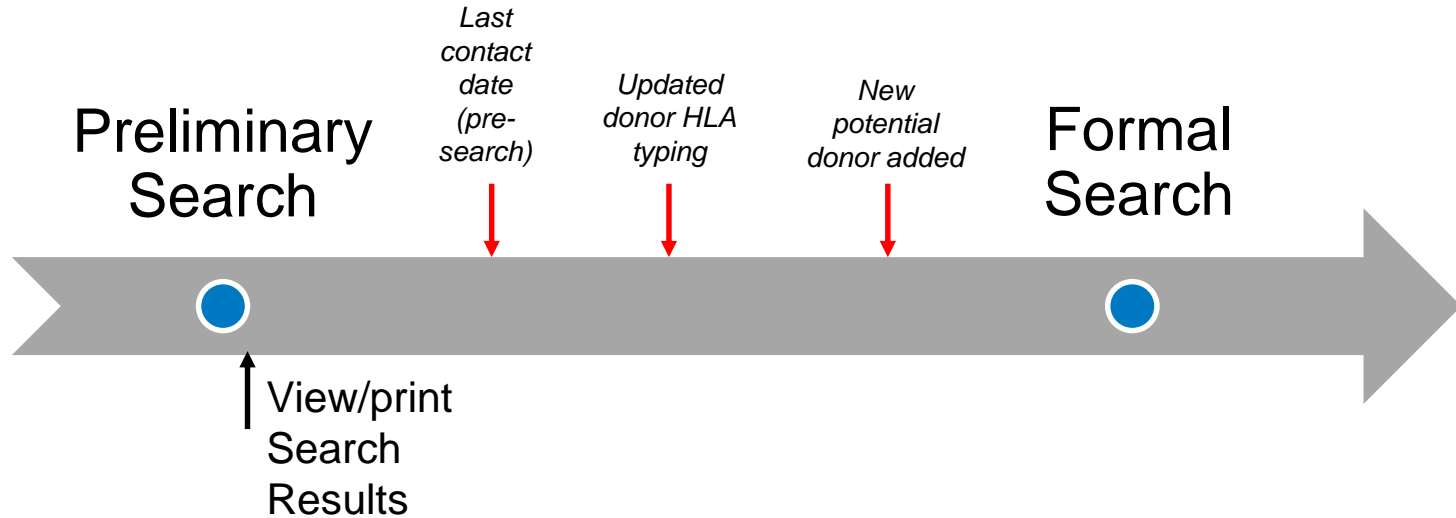
The Building Blocks of HapLogic

Collect patient HLA typing data → Generate haplotypes and genotype lists → Incorporate into HapLogic algorithm → Visualize in search reports

HLA Typing Data & Primary Data

Race/Ethnicity Information

Donor/CBU HLA Population Genetics
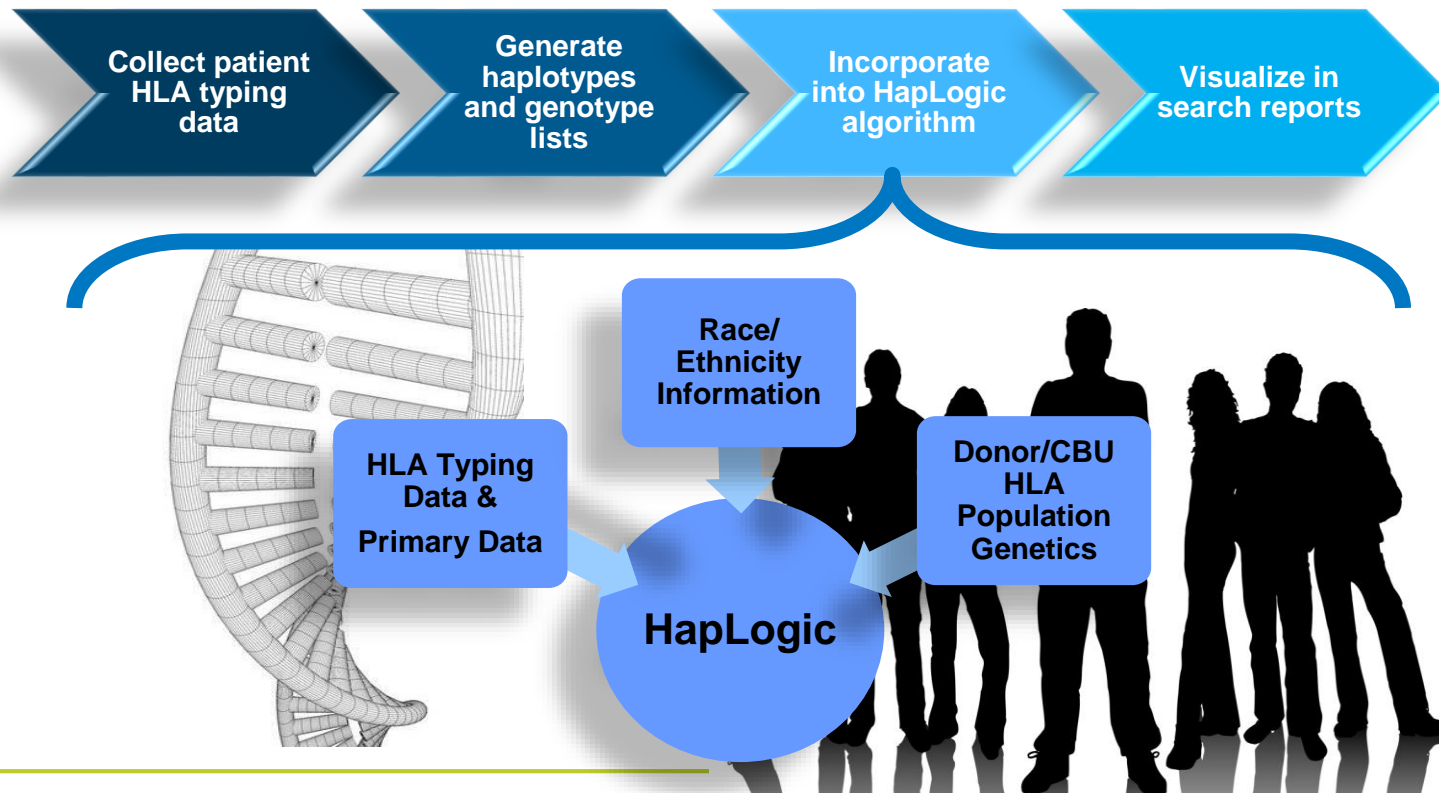
HapLogic

HapLogic search in Traxis includes a large fraction of the BMDW Inventory

Bone Marrow Donors Worldwide

>30 million donors
>730,000 CBUs

NMDP/Be The Match

>19 million donors
>420,000 CBUs
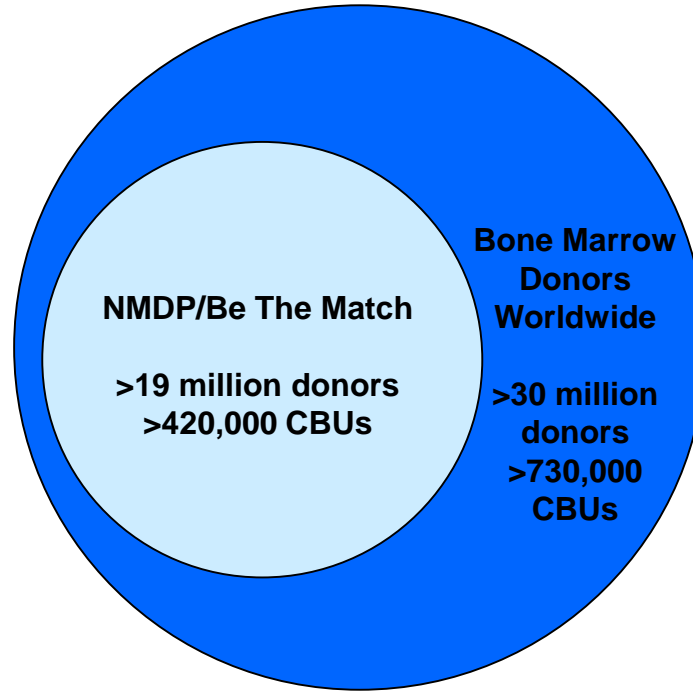
HapLogic III Donor Sort Order

(based on 5-locus allele level)

Match Category
Out of 10 alleles

Probability → 10/10 → 8/8 → 9/10 → 7/8 → 8/10 → 6/8

Age Groups → <30 → 30-39 → 40-49 → 50+

Last Donor Contact Date
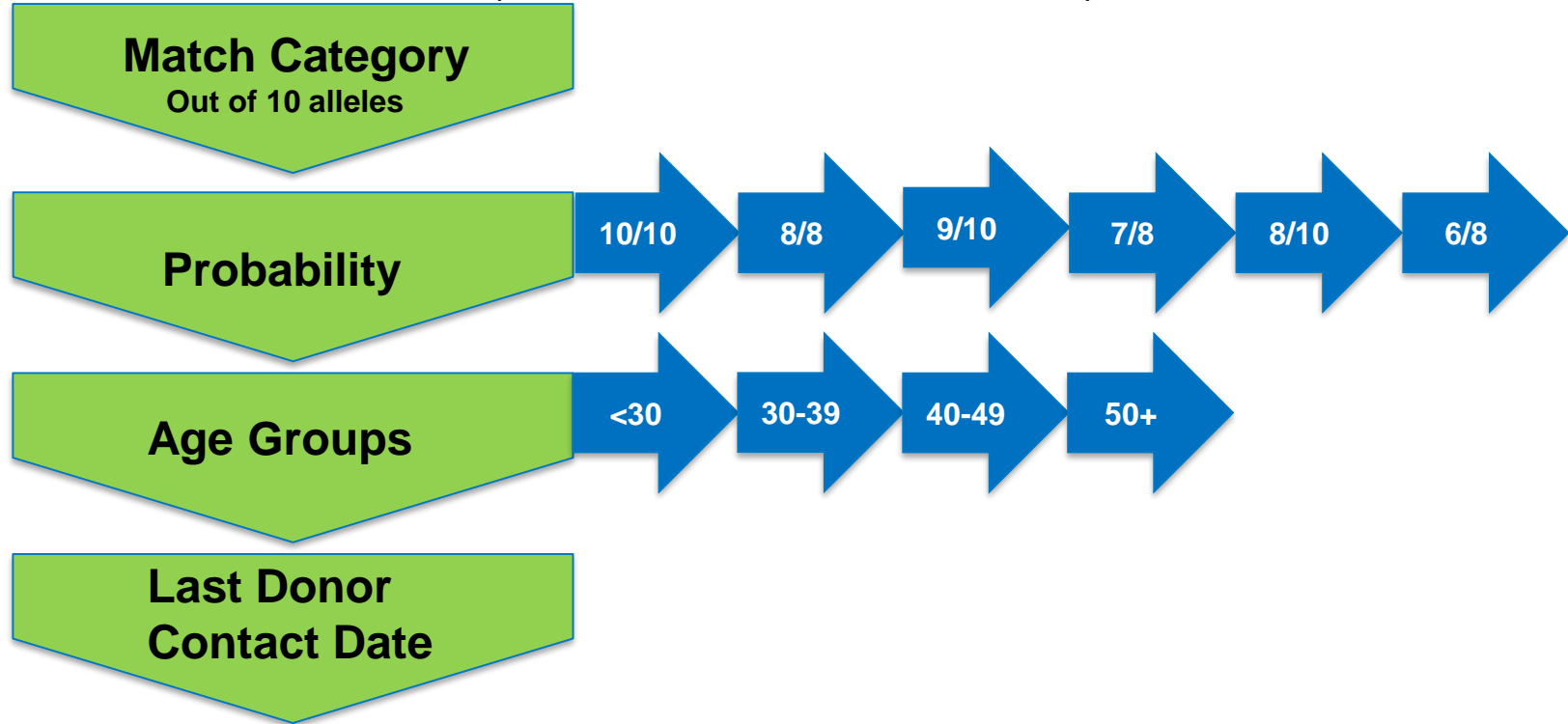
Donor Selection

Potential Donor List in Traxis

A	B	C	DRB1	DQB1	DRB3	DRB4	DRB5	DPB1
01:01	18:WAWE	06:02	15:AWUBS	06:02				04:ASXKD
25:01	57:01	12:03						23:RGPX

Donor List: 5,983

	Ref	Demographics Add/Remove Data	Ctr	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1	DPB1	DPB1 TCE
☐	7 AV P	ATGFL-91146 Age: 18 Sex: F CMV: Untested Race(Eth): Unknown ()	136	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	P P 99	01:AWFBB 25:AH	18:AUKJX 57:AGXDH	06:AWFCH 12:AUKHW	15:AUKJG	06:AWFDB	04:ASXKD	Permissive
☐	8 AV J	2260-1619-4 Age: 21 Sex: F CMV: Untested Race(Eth): White ()	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	A A 99	P A 99	P P 99	P P 99	P P 99	01:01 25:01	18:RRG 57:01	06:DDAR 12:AJUHH	15:01 15:01	06:AJYDH	02:AGXDS 04:AJYCM	Permissive
☐	9 AV S	2761-9629-2 Age: 20 Sex: M CMV: Untested Race(Eth): Unknown (NHIS)	130	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	A A 99	01:AWFBB 25:AH	18:AUKJX 57:AGXDH	06:AWFCH 12:AUKHW	15:01 15:01	06:02 06:02	03:FNVX 23:01	Nonpermissive
☐	10 AV J	2233-9642-5 Age: 26 Sex: M CMV: Untested Race(Eth): White ()	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	P P 99	01:ZNJY 25:TMJD	18:ZMHH 57:RGPU	06:ZTGB 12:SSXP	15:XSPA 15:XSPB	06:ZTWC 06:ZTWB	04:01 04:ZWNC	Permissive
☐	11 AV J	2240-0008-3 Age: 21 Sex: F CMV: Untested Race(Eth): White ()	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	P P 99	01:ABGEP 25:AH	18:TXYF 57:RGPU	06:ZAMM 12:ABGFP	15:01 15:01	06:AAAXA	02:ACMGJ 04:ACMGM	Permissive
☐	12 AV J	2232-0611-1 Age: 29 Sex: F CMV: Untested Race(Eth): White ()	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	P P 99	01:PWKH 25:AH	18:RBDH 57:RBJP	06:SSWG 12:SSXP	15:01 15:01	06:WHG	02:01 03:FNVX	Nonpermissive
☐	13 AV B	1985-7063-2 Age: 27 Sex: F CMV: Untested Race(Eth): Unknown ()	107	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	P P 99	A A 99	01:AWFBB 25:AH	18:AUKJX 57:AGXDH	06:AWFCH 12:AUKHW	15:01 15:01	06:02 06:02	04:01 23:01	Match

A= Allele **A**
P=Potential **P**
M=Mismatch **M**
L=Allele mismatch **L**

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Factors to consider in selection

- Younger donors have better outcomes *(Kollman et al. Blood 2016)*
- DPB1 Match and Permissive have better outcomes than nonpermissive *(Pidala et al. Blood 2014; Fleischhauer et. al. Lancet Oncology 2012)*

Custom Criteria in Traxis

Custom Criteria for DPB1

DPB1 filtered

	Ref	Demographics Add/Remove Data	A	B	C	DRB1	DQB1	DPB1	DPB1 TCE
☐	1 AV	1671-5669-4 Age: 28 Sex: F CMV: Untested Race(Eth): White (NHIS)	P P 99	P P 99	P P 99	P P 99	P P 99	01:01 04:HJMR	Permissive
☐	2 AV	1465-3077-9 Age: 23 Sex: F CMV: Untested Race(Eth): White (NHIS)	P P 99	P P 99	P P 99	P P 99	P P 99	04:HJMR 20:01	Permissive
☐	3 AV	1919-6432-9 Age: 20 Sex: F CMV: Untested Race(Eth): White (NHIS)	A A 99	P A 99	A A 99	P P 99	A A 99	02:01 04:01	Permissive
☐	4 AV	1732-0495-9 Age: 23 Sex: M CMV: Untested Race(Eth): White (NHIS)	P P 99	P P 99	P P 99	P P 99	P P 99	04:ACMGM 23:RGPX	Match
☐	5 AV	1455-1326-3 Age: 22 Sex: F CMV: Untested Race(Eth): White (NHIS)	P P 99	P P 99	P P 99	P P 99	P P 99	02:TYHK 04:HJMR	Permissive
☐	6 AV P	ATGFL-91146 Age: 18 Sex: F CMV: Untested Race(Eth): Unknown ()	P P 99	P P 99	P P 99	P P 99	P P 99	04:ASXKD	Permissive

Donor List: 38

DPB1 TCE Group Match Options

- <u>Match</u>- includes donors with DPB1 alleles that are either allele matched or antigen recognition site (ARS) matched to the patient's alleles

- <u>Permissive</u>- includes donors with DPB1 alleles considered to be permissive to the patient's alleles

DPB1 TCE Group Match Options (cont.)

- <u>Non Permissive</u>- includes donors with DPB1 alleles considered to be non-permissive to the patient's alleles in either the host vs graft direction or the graft vs host direction.

- <u>Potential</u>- includes donors where match, permissive, or nonpermissive cannot be determined without further typing.

Custom Criteria of non-HLA factors

Demographics Add/Remove Data					Ctr	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1
2257-2088-7 Age: 22 Sex: F CMV: Untested Race(Eth): White ()	ABO: Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Apr 28, 2017	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	A A 99	P A 99	P A 99	A A 99	P 99
2328-2487-0 Age: 22 Sex: F CMV: Untested Race(Eth): Unknown ()	ABO: O+ Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Feb 26, 2017	132	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	A A 99
2306-1538-7 Age: 25 Sex: F CMV: Untested Race(Eth): Unknown ()	ABO: O- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Aug 10, 2016	132	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	A A 99
2231-9067-9 Age: 26 Sex: M CMV: Untested Race(Eth): White ()	ABO: Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Jun 21, 2016	135	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P P 99
1480-5696-3 Age: 30 Sex: F CMV: Untested Race(Eth): Black (NHIS)	ABO: A- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Jul 21, 2017 Contact Type: Pre-Search HHQ	Registration Date: Aug 28, 2014	1	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P P 99
1150-7827-1 Age: 31 Sex: F CMV: Untested Race(Eth): White (NHIS)	ABO: Preg: Wght: 107.0	Rep Smpl: Y Prev Don: 0 Pos IDM:	Lst Cnt Date: Jul 18, 2017 Contact Type: Pre-Search HHQ	Registration Date: Aug 18, 2011	1	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P P 99
0903-4399-7 Age: 38 Sex: F CMV: Untested Race(Eth): Unknown (NHIS)	ABO: Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Oct 14, 2012	126	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P P 99
1634-8461-1 Age: 30 Sex: M CMV: Negative Race(Eth): Unknown ()	ABO: O- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Apr 15, 2014	107	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P 99	P 99	P 99	A A 99	A A 99
5218-5007-3 Age: 38 Sex: F CMV: Untested Race(Eth): White ()	ABO: Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	Registration Date: Nov 12, 2006	107	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P P 99

Custom Criteria in Traxis

ABO filtered list

	Ref	Demographics Add/Remove Data					Ctr	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1
☐	1 AV N	2306-1538-7 Age: 25 Sex: F CMV: Untested Race(Eth): Unknown ()		ABO: O- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	132	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	A A 99
☐	2 AV B	1634-8461-1 Age: 30 Sex: M CMV: Negative Race(Eth): Unknown ()	014	ABO: O- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	107	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	A A 99
☐	3 AV N	2322-6267-5 Age: 49 Sex: M CMV: Untested Race(Eth): Unknown ()		ABO: O- Preg: Wght:	Rep Smpl: N Prev Don: 0 Pos IDM:	Lst Cnt Date: Contact Type:	132	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	A A 99

Alleles	Looks like a…	But NMDP considers it a…
DRB1*04:92 DRB1*04:07	L	P

Antigen Recognition Site Alleles(ARS)

-Most important part of the HLA molecule

A*02:05

A*02:179

A*02:324
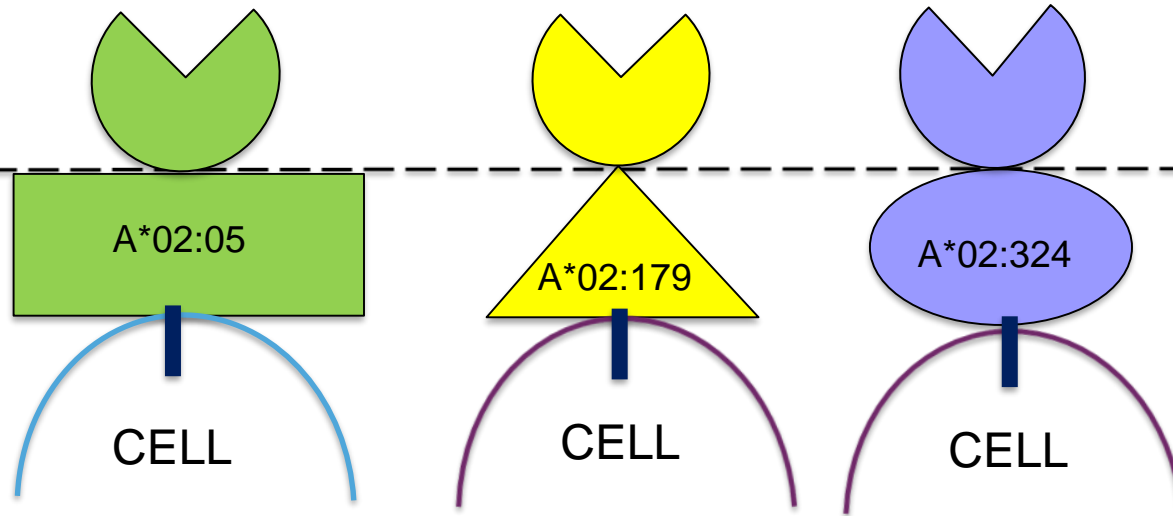
CELL

CELL

CELL

Immune cells will see the 3 different molecules as the "same"

Antigen Recognition Site (ARS)

- ARS identical alleles have not been shown to elicit an immune response and are not considered mismatched by the NMDP

Status	Phenotype	A	B	C	DRB1	DQB1
PRLM	Pheno 1	24:02 24:07	38:02 40:01	04:01 07:02	15:AMKZA 04:03	05:02 03:02

Ref	Demographics Add/Remove Data	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1 AV	1720-8931-0 Age: 28 Sex: F CMV: Untested Race(Eth): Asian (NHIS)	P A 99	A A 99	P A 99	P A 99	A A 99	24:WYU 24:07	38:02 40:01	04:BSUG 07:02	15:02 04:03	05:02 03:02
2 AV	1476-9852-6 Age: 23 Sex: M CMV: Untested Race(Eth): Asian (NHIS)	A A 99	A A 99	P A 99	P A 99	A A 99	24:02 24:07	38:02 40:01	04:82 07:02	15:02 04:03	05:02 03:02
3 AV	0908-4399-6 Age: 23 Sex: M CMV: Untested Race(Eth): Asian (NHIS)	P A 99	P P 99	P P 99	P A 99	A P 99	24:KNHR 24:07	38:UF 40:JAFD	04:JXEY 07:JXUV	15:02 04:03	05:02 03:RCH

G groups

Phenotype	A	B	C	DRB1	DQB1
Pheno 1 ▾	11:01 29:02	55:01 45:01	03:AARCC 06:DDAR	04:01 14:BCAD	05:ANKSC 03:ANJTD

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1759-0575-1 Age: 29 Sex: M CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A P 99	P P 99	A P 99	P P 99	11:AWFBF 29:AWFBH	55:HMCD 45:DCFY	03:AWFCC 06:AWFCH	04:01 14:BCAD	05:AGVGW 03:AHJRR
1833-0143-1 Age: 25 Sex: F CMV: Untested Race(Eth): Unknown (NHIS)	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A P 99	P P 99	A P 99	P P 99	11:AWFBF 29:AWFBH	55:HMCD 45:DCFY	03:AWFCC 06:AWFCH	04:01 14:54	05:03 03:01
2164-8838-7 Age: 24 Sex: M CMV: Inconclusive Race(Eth): White ()	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	A A 99	A A 99	P P 99	A P 99	P P 99	11:01 29:02	55:01 45:01	03:03 06:02	04:01 14:54	05:03 03:01
1160-0758-4 Age: 22 Sex: F CMV: Untested Race(Eth): Unknown ()	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A P 99	P P 99	A P 99	P P 99	11:AWFBF 29:AWFBH	55:HMCD 45:DCFY	03:AWFCC 06:AWFCH	04:01 14:54	05:03 03:01
1512-2845-9 Age: 27 Sex: F CMV: Negative Race(Eth): White ()	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A P 99	P P 99	A P 99	P P 99	11:ACMGG 29:VSBU	55:01 45:FJH	03:ABGFK 06:ZAMM	04:01 14:54	05:03 03:01

DRB1*14:BCAD = DRB1*14:01:01G

DRB1*14:01/14:54

Where is the reference to alleles that are ARS identical?

- ## IMGT database
  - https://www.ebi.ac.uk/ipd/imgt/hla/ambig.html

HLA-DRB1 Ambiguities, Release 3.29.0				
Sequences identical over exons 2				
Code in table	Allele 1	Allele 2	Allele 3	Allele 4
DRB1*14:01:01G	DRB1*14:01:01	DRB1*14:54:01:01	DRB1*14:54:01:02	DRB1*14:54:06

Haplogic match predictions without typing

A	B	C	DRB1	DQB1
02:01	44:02	05:01	04:01	03:01

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1497-1928-8 Age: 22 Sex: M CMV: Untested Race(Eth): White (HIS)	10/10	10/10=86 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	86	02:AWFBC 02:AWFBC	44:AWFBY 44:AWFBY	05:AWFCG 05:AWFCG	04:01 04:01	
0834-3836-6 Age: 29 Sex: F CMV: Untested Race(Eth): White (HIS)	10/10	10/10=86 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	99	A A 99	86	02:DFKP 02:DFKP	44:WRJ 44:WRJ		04:01 04:01	
0937-0113-4 Age: 29 Sex: F CMV: Untested Race(Eth): White (HIS)	10/10	10/10=86 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	86	02:EJTJ	44:EAAU	05:EKRF	04:01	
0786-8266-3 Age: 27 Sex: F CMV: Untested Race(Eth): White (HIS)	10/10	10/10=86 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	99	A P 99	86	02:DUEK 02:DUEK	44:DNBT 44:DNBT		04:01 04:AMAD	

Linkage
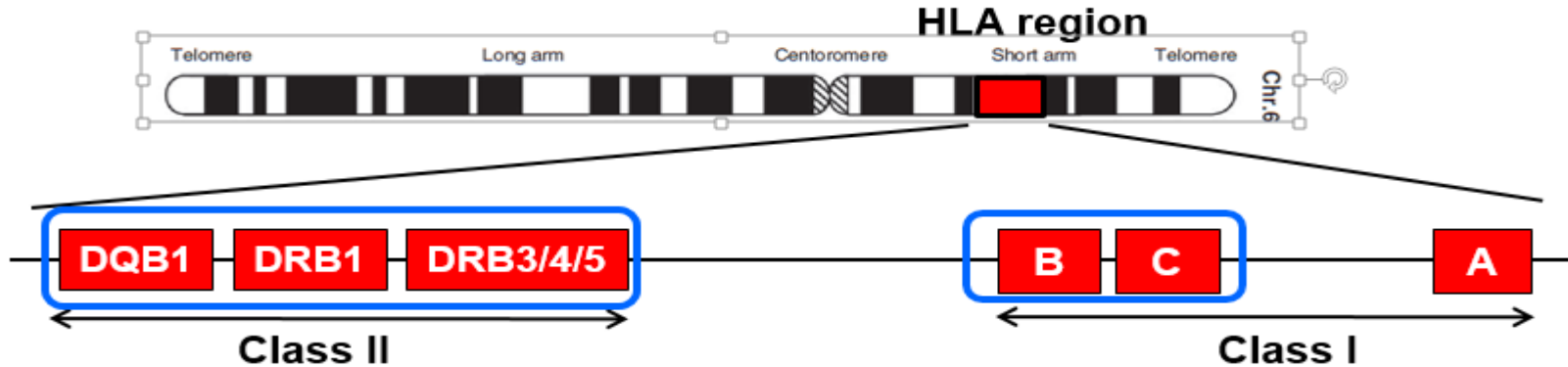
1. B-C associations
2. DRB1-DQB1 associations
3. DRB1-DRB3/4/5 associations

Match predictions without typing

A	B	C	DRB1	DQB1
01:01	38:01	12:03	11:01	03:01
02:01	51:01	07:01	13:01	06:03

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
0539-7082-8 Age: 33 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 99	P+ P+ 99	1	P P 99	99	01:YAG 02:YAH	38:AF 51:AFJR		11:AFUN 13:ACVZ	
1420-8592-7 Age: 34 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	A A 99	A A 99	1	A A 99	99	01:01 02:01	38:01 51:01		11:01 13:01	
5341-7343-0 Age: 45 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 99	P P 99	1	A A 99	99	01:ECAD 02:DFKP	38:JV 51:DUKD		11:01 13:01	

HapLogic Accuracy
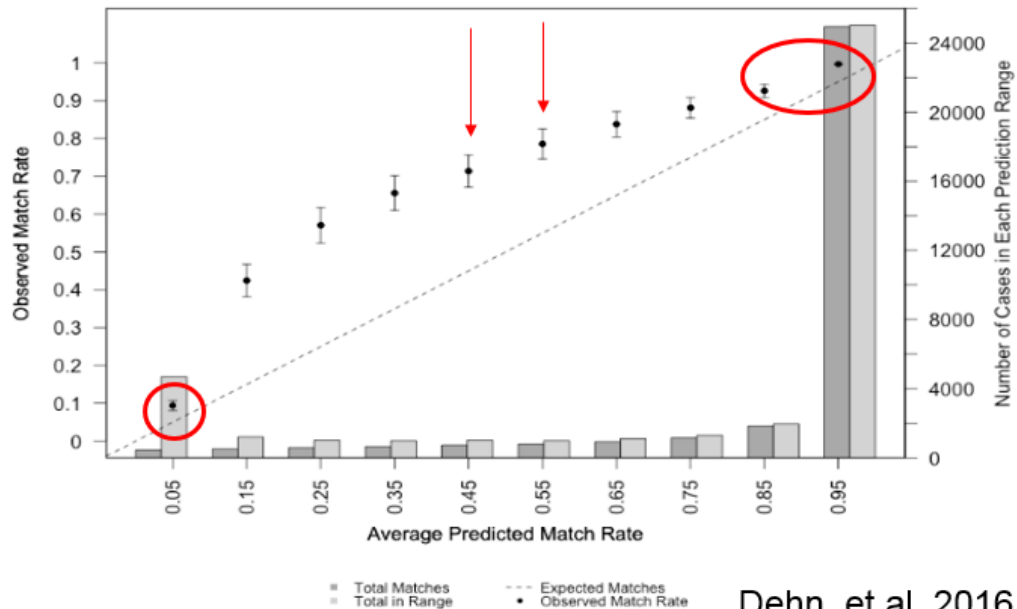
Dehn, et al. 2016

Comparing NMDP predictions with coop and BMDW lists

	A	B	C	DRB1	DQB1
	01:01	38:01	12:03	11:01	03:01
	02:01	51:01	07:01	13:01	06:03

Demographics Add/Remove Data	MCat	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
Israel-Ezer Mizion Donor Count: 1	10/10	A A	A A	P P	P P		01:01 02:01	38:01 51:01	12:XX 07:XX	11:AD 13:AB	
Spain Donor Count: 1	10/10	P P	P P		P P		01:XX 02:XX	38:XX 51:XX		11:XX 13:XX	
Portugal Donor Count: 1	10/10	P P	P P		P P		01:XX 02:XX	38:XX 51:XX		11:XX 13:XX	
Portugal Donor Count: 1	10/10	P P	P P		A A		01:NVSZ 02:NVTE	38:PCBC 51:PCBS		11:01 13:01	
Brazil Donor Count: 1	10/10	P P	P P		P P		01:ANBUY 02:ANDKM	38:ANGCF 51:ANGCH		11:ANCVB 13:ANERZ	
Brazil Donor Count: 1	10/10	P P	P P		P P		01:APUWR 02:JXWN	38:KEAC 51:KERU		11:KCJJ 13:KBJB	

NMDP predictions

A	B	C	DRB1	DQB1
01:01	38:01	12:03	11:01	03:01
02:01	51:01	07:01	13:01	06:03

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
0892-1077-7 Age: 28 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=99 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P A 99	01:KTKP 02:DFKP	38:JV 51:DUKD	12:BCK 07:CVKN	11:01 13:01	03:ENWH 06:03
0752-3669-5 Age: 34 Sex: M CMV: Untested Race(Eth): White (HIS)	10/10	10/10=3 9/10=96 8/10=99	8/8=3 7/8=99 6/8=99	P+ P+ 99	P+ P+ 99	3	P P 99	97	01:YAG 02:ANGR	38:AF 51:AFJR		11:ARKC 13:ARCR	
0539-7082-8 Age: 33 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 99	P+ P+ 99	1	P P 99	99	01:YAG 02:YAH	38:AF 51:AFJR		11:AFUN 13:ACVZ	
1420-8592-7 Age: 34 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	A A 99	A A 99	1	A A 99	99	01:01 02:01	38:01 51:01		11:01 13:01	
5341-7343-0 Age: 45 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 99	P P 99	1	A A 99	99	01:ECAD 02:DFKP	38:JV 51:DUKD		11:01 13:01	

What donors would you type?

	A	B	C	DRB1	DQB1
	01:01	38:01	12:03	11:01	03:01
	02:01	51:01	07:01	13:01	06:03

Demographics	MCat	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
Israel-Ezer Mizion Donor Count: 1	10/10	A A	A A	P P	P P		01:01 02:01	38:01 51:01	12:XX 07:XX	11:AD 13:AB	
Spain Donor Count: 1	10/10	P P	P P		P P		01:XX 02:XX	38:XX 51:XX		11:XX 13:XX	
Portugal Donor Count: 1	10/10	P P	P P		P P		01:XX 02:XX	38:XX 51:XX		11:XX 13:XX	
Portugal Donor Count: 1	10/10	P P	P P		A A		01:NVSZ 02:NVTE	38:PCBC 51:PCBS		11:01 13:01	
Brazil Donor Count: 1	10/10	P P	P P		P P		01:ANBUY 02:ANDKM	38:ANGCF 51:ANGCH		11:ANCVB 13:ANERZ	
Brazil Donor Count: 1	10/10	P P	P P		P P		01:APUWR 02:JXWN	38:KEAC 51:KERU		11:KCJJ 13:KBJB	

NMDP Race/Ethnic Groups

CAU (White)
- Middle Eastern/North African Coast
- North American

AFA (Black)
- African American
- African Black
- Caribbean Black

API (Asian)
- Asian Indian
- Filipino
- Hawaiian
- Japanese
- Korean
- Chinese
- South Central/South East Asian Indian
- Vietnamese

NAM
- American Indian or Alaska Native
- Caribbean Indian

HIS (Hispanic)
- Caribbean Hispanic
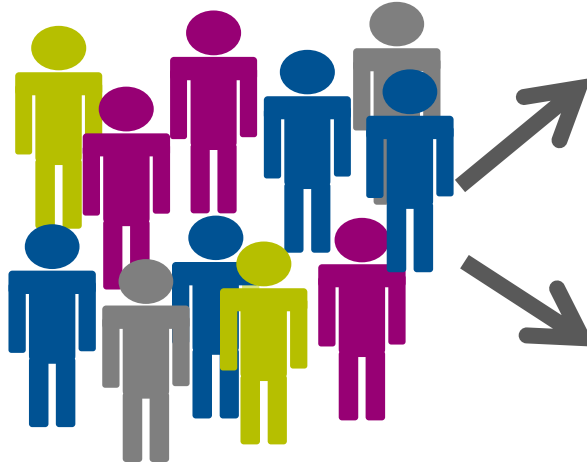- Mexican or Southwestern Hispanic
- South or Central American Hispanic

Diversity and Ethnicity

Recipient
Self identified as Asian and carries common Asian markers

Potential Donor Pool

More Likely to Match

Less Likely to Match

Race impacting donor predictions

Race impacting donor predictions and the BMDW

Demographics Add/Remove Data	MCat	A	B	C	DRB1	DQB1	A	B	C	DRB1
Brazil Donor Count: 1	10/10	P P	P P		P P		24:KKRD 02:KKRC	07:ARJAG 51:KDEP		01:HNVN 04:JKZE
Brazil Donor Count: 1	10/10	P P	P P		P P		24:RFPD 02:PYYY	07:ARJAU 51:VZMW		01:VXXU 04:VXYR
Canada-UBMDR Donor Count: 1	10/10	P P	P P		P P		24:XX 02:XX	07:XVC 51:XX		01:YJ 04:XSF
Australia Donor Count: 3	10/10	P P	P P		P P		s24 s2	s7 s51		01:XX 04:XX
Polish Central Donor Count: 1	10/10	P P	P P		P P		24:XX 02:XX	07:XX 51:XX		01:XX 04:XX
Japan Donor Count: 27	10/10	P P	P P		P P		s24 s2	s7 s51		s1 s4
Japan Donor Count: 3	10/10	P P	P P		P P		24:BNZZ 02:BNTS	07:BFDZ 51:BGGE		01:BNHB 04:BNVG

Other HLA barriers to consider

No potential 10/10 donors with good predictions?

A	B	C	DRB1	DQB1
01:BMMP 03:XKS	08:01 51:01	07:01 12:03	03:01 04:07	02:PU 03:AFB

Donor:10/10 ABCDRDQ — **Total: 173**

Select	Row	Mismatch	Count
☐	1	None	173

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
0569-7451-2 Age: 41 Sex: F CMV: Untested Race(Eth): AmInd/Alaska (NHIS)	10/10	10/10=1 9/10=67 8/10=99	8/8=1 7/8=99 6/8=99	P+ P+ 99	P+ P+ 99	1	P+ A+ 99	66	01:YAG 03:ANPZ	08:AKUY 51:AFKG		03:XBD 04:07	
0486-4176-5 Age: 39 Sex: M CMV: Untested Race(Eth): White (HIS)	10/10	10/10=1 9/10=18 8/10=93	8/8=1 7/8=27 6/8=99	P+ P+ 99	P P 99	1	P P 29	79	01:XX 03:XX	08:XX 51:XX		03:GWR 04:YK	
0092-7672-6 Age: 44 Sex: M CMV: Positive Race(Eth): AmInd/Alaska ()	10/10	10/10=1 9/10=13 8/10=99	8/8=1 7/8=13 6/8=99	P P 99	P P 99	1	A P 12	P P 99	01:XX 03:XX	08:XX 51:XX		03:01 04:RS	02:01 03:02
0416-8830-0 Age: 53 Sex: F CMV: Untested Race(Eth): Hispanic ()	10/10	10/10=1 9/10=12 8/10=93	8/8=1 7/8=19 6/8=99	P+ P+ 99	P+ P+ 99	1	P P 18	84	01:XX 03:XX	08:XX 51:XX		03:DME 04:DEX	

DQB1 Mismatches

- Isolated DQB1 mismatches showed no significant negative impact on survival (Lee, S.J. et al. Blood 2007, 110: 4576-4583)

- DQB1 mismatches have been associated with a slight increase in acute GVHD (Pidala, J. et al. Blood 2014, 124: 2596-2606), however, consistent with the earlier study, showed no significant impact on survival

Finding 8/8 donors in Traxis

Donor:10/10 ABCDRDQ			Total: 173
Select	**Row**	**Mismatch**	**Count**
☐	1	None	173
Donor:9/10 ABCDRDQ			**Total: 7233**
☐	2	HLA-A	2059
☐	3	HLA-B	2745
☐	4	HLA-C	59
☐	5	HLA-DRB1	2361
✔	6	HLA-DQB1	9

Finding 8/8 donors

Ref	Demographics Add/Remove Data	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
168 AV K	5193-4669-6 Age: 47 Sex: F CMV: Untested Race(Eth): Unknown ()	10/10=1 9/10=2 8/10=99	8/8=1 7/8=2 6/8=99	P P 99	P P 99	1	P P 1	P P 99	01:YAG 03:ANPZ	08:XX 51:XX		03:XX 04:XX	02:01 03:02
169 AV	0024-9410-2 Age: 50 Sex: F CMV: Untested Race(Eth): White ()	10/10=1 9/10=2 8/10=97	8/8=1 7/8=2 6/8=97	P P 95	P P 99	1	A P 1	P P 99	s1 s3	s8 s51		03:01 04:RS	02:01 03:02
170 AV	0084-3480-5 Age: 58 Sex: F CMV: Untested Race(Eth): White ()	10/10=1 9/10=2 8/10=86	8/8=1 7/8=2 6/8=86	P P 85	P P 99	1	A P 1	P P 99	s1 s3	s8 s51		03:01 04:XX	02:01 03:02
171 AV P	WSZ-1004466 Age: 56 Sex: F CMV: Untested Race(Eth): White ()	10/10=1 9/10=2 8/10=86	8/8=1 7/8=2 6/8=86	P P 85	P P 99	P P 1	A P 1	P P 99	s1 s3	s8 s51	s7	03:01 04:XX	02:01 03:02
172 AV K	5079-1285-5 Age: 52 Sex: F CMV: Untested Race(Eth): Unknown ()	10/10=1 9/10=2 8/10=86	8/8=1 7/8=2 6/8=86	P P 85	P P 99	1	P P 1	P P 99	s1 s3	s8 s51		03:FR 04:XX	02:AB 03:BE
173 AV O	5073-7645-7 Age: 50 Sex: M CMV: Untested Race(Eth): White ()	10/10=1 9/10=2 8/10=86	8/8=1 7/8=2 6/8=86	P P 85	P P 99	P P 1	P P 1	P P 99	s1 s3	s8 s51	s7	03:ASVB 04:XX	02:XX 03:NZY
174 AV B	1648-8786-1 Age: 21 Sex: F CMV: Positive Race(Eth): Unknown ()	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A P 99	P L 0	01:AWFBB 03:AWFBE	08:AWFBP 51:AWFBZ	07:AWFCJ 12:AUKHW	03:01 04:HTWY	02:01 03:01
175 AV B	5333-6282-8 Age: 28 Sex: M CMV: Untested Race(Eth): White ()	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A A 99	P L 0	01:KTEZ 03:ECAF	08:XKT 51:CVAE	07:CVKN 12:BCK	03:01 04:07	02:MS 03:ENWH
176 AV P	SUL-2101710 Age: 30 Sex: M CMV: Negative Race(Eth): White ()	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A A 99	A A 99	A A 99	P L 0	01:01 03:01	08:01 51:01	07:01 12:03	03:01 04:07	02:01 03:01
177 AV B	1866-2710-5 Age: 33 Sex: F CMV: Untested Race(Eth): Unknown ()	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A P 99	P L 0	01:AWFBB 03:AWFBE	08:AWFBP 51:AWFBZ	07:AWFCJ 12:AUKHW	03:01 04:HTWY	02:01 03:01
178 AV P	FFM-157652 Age: 45 Sex: F CMV: Untested Race(Eth): Unknown ()	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	A A 99	A A 99	A A 99	P L 0	01:01 03:01	08:01 51:01	07:01 12:03	03:01 04:07	02:01 03:01

NATIONAL MARROW DONOR PROGRAM BE THE MATCH®

How to use composite predictions

A	B	C	DRB1	DQB1
01:01	07:10	07:02	11:04	03:01
11:01	35:08	04:01	15:01	06:02

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1116-4411-8 Age: 58 Sex: F CMV: Untested Race(Eth): Unknown ()		10/10=0 9/10=99 8/10=99	8/8=0 7/8=99 6/8=99	P P 99	L A 0	P P 99	A A 99	P A 99	01:KTKP 11:BDFZ	07:ARVUD 35:08	07:FEWC 04:FEVX	11:04 15:01	03:ENWH 06:02
0717-1987-6 Age: 46 Sex: M CMV: Untested Race(Eth): White (NHIS)		10/10=0 9/10=89 8/10=99	8/8=0 7/8=89 6/8=99	P+ P+ 99	M- A+ 0	89	P+ P+ 99	99	01:TUS 11:ANXJ	39:AFCS 35:08		11:ARAP 15:VYF	
5300-0269-0 Age: 28 Sex: F CMV: Untested Race(Eth): White ()		10/10=0 9/10=19 8/10=99	8/8=0 7/8=19 6/8=99	P P 99	L P 0	P P 99	A A 99	P P 99	01:CPZT 11:BEYE	07:AREGZ 35:BWRB	07:CXZX 04:CXZW	11:04 15:01	03:SNFR 06:WHG
5230-1016-3 Age: 46 Sex: F CMV: Untested Race(Eth): White ()		10/10=0 9/10=19 8/10=99	8/8=0 7/8=19 6/8=99	P P 99	L P 0	A P 99	A P 99	P P 99	01:BYSG 11:BEYE	07:AREGN 35:BWRB	07:02 04:KBG	11:04 15:01	03:SNFR 06:WHG
5333-7327-0 Age: 51 Sex: F CMV: Untested Race(Eth): White ()		10/10=0 9/10=19 8/10=99	8/8=0 7/8=19 6/8=99	P P 99	L P 0	P P 99	A A 99	P P 99	01:KTKP 11:BDFZ	07:AREGZ 35:EBZM	07:FEWC 04:FEVX	11:04 15:01	03:ENWH 06:02
1072-0658-3 Age: 46 Sex: F CMV: Untested Race(Eth): White (NHIS)		10/10=0 9/10=19 8/10=97	8/8=0 7/8=19 6/8=98	P P 99	L P 0	98	P P 99	99	01:KTCK 11:KAEY	07:AREHF 35:HSDU		11:JNFZ 15:JUFU	

B*35:BWRB=35:01 35:05 **35:08** 35:15 35:34 35:40N 35:42 35:51 35:57

Less common patient alleles

	A	B	C	DRB1	DQB1
	02:01	35:01	07:02	01:01	03:03
	02:20	07:02	04:01	09:01	05:01

Ref	Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1 AV J	2209-6457-1 Age: 42 Sex: M CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 1	P P 99	A P 99	P A 99	98	02:RZA 02:RZA	35:AMUH 07:AMUE	07:02 04:01	01:AE 09:01	
2 AV E	2139-9126-8 Age: 57 Sex: M CMV: Inconclusive Race(Eth): White ()	10/10	10/10=1 9/10=99 8/10=99	8/8=1 7/8=99 6/8=99	P P 1	P P 99	P P 99	P P 99	98	02:ADSU	35:JAED 07:JADP	07:JAET 04:TYB	01:BP 09:AB	
3 AV	0547-5866-9 Age: 39 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=1 9/10=97 8/10=99	8/8=1 7/8=97 6/8=99	P P 1	P P 96	99	P A 99	99	02:XX	35:XX 07:XX		01:MV 09:01	
4 AV K	1158-0662-2 Age: 26 Sex: M CMV: Untested Race(Eth): Unknown ()	10/10	10/10=1 9/10=96 8/10=99	8/8=1 7/8=97 6/8=99	P P 1	P P 99	96	P P 99	98	02:MUUK	35:PYNF 07:ARDZU		01:NWHD 09:PYVS	
5 AV	0463-7207-4 Age: 49 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=96 8/10=99	8/8=1 7/8=97 6/8=99	P+ P+ 1	P+ P+ 99	96	P A 99	98	02:XX	35:XX 07:XX		01:MV 09:01	

Search Strategy Expertise Available

Provides a prioritized list of potential matches to aid in the selection of donors and CBUs by TCs

- Advisors with HLA expertise use patient HLA typing and knowledge of haplotypes and linkage frequencies to develop a search strategy.

- Make donor/cord blood unit recommendations based on TC criteria.

- Turnaround time within 5 days

- Search Be The Match registry as well as all Global registries

Search Strategy Advice (SSA)

Search Results

NMDP, BMDW, and Coop Registries:

Potential 10/10 donors:

ID/Registry	Int'l Code / # of donors	Age	Sex	A	A	B	B	C	C	DRB1	DRB1	DQB1	DQB1	Suggested Typing	DPB1
2059-0419-6		23	M	01:01	02:01	08:01	27:05	02:02	07:01	01:01	03:01	02:AWFCV	05:01		Match
1957-3604-6		22	M	01:01	02:ANGA	08:01	27:05	02:02	07:01	01:01	03:01	02:01	05:01		Permissive
1263-0027-6		27	M	01:AWFBB	02:01	08:01	27:AWFBS	02:02	07:AWFEA	01:AWFDC	03:01	02:01	05:01		Permissive
1930-7349-1		27	F	01:01	02:ANGA	08:01	27:05	02:02	07:01	01:01	03:01	02:01	05:01		Match
1679-1611-3		28	F	01:BMMP	02:ANGA	08:01	27:EKN	02:02	07:AGCEU	01:01	03:01	02:01	05:01	CT	Permissive
1933-1718-7		20	F	01:01	02:ANGA	08:01	27:05	02:02	07:01	01:01	03:01	02:01	05:01		Permissive
1944-9173-4		22	F	01:BMMP	02:ANGA	08:01	27:EKN	02:ACMGS	07:AFXNW	01:01	03:01	02:01	05:01		Permissive
2017-5050-2		26	F	01:01	02:ANGA	08:01	27:05	02:02	07:01	01:01	03:01	02:01	05:01		Match
1726-0868-9		28	M	01:AKXDH	02:AJPXT	08:ADYBS	27:ADYCN	02:ABRYC	07:AMPVS	01:AGAVR	03:AJRVB	02:AMDP	05:WCH		Match

Discussion Questions

Question 1

Does this donor match at C and is this donor likely to be a 9/10 match ?

Patient Typing:

	A	B	C	DRB1	DQB1
	24:AHFET	07:02	07:ABXAM	08:ASAHX	03:01
	66:01	41:ASAHW	17:03	13:AAJB	04:02

Donor typing:

Demographics Add/Remove Data	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
MAN-27808 Age: 26　Sex: M　CMV: Untested Race(Eth): White ()	10/10=0 9/10=99 8/10=99	8/8=0 7/8=99 6/8=99	M A 0	A P 99	P P 99	P P 99	99	02:01 66:01	07:02 41:02	07:02 17:01	08:01 13:03	

Yes or No?

Question 2

If a 10/10 donor is not available, would you consider any of the below donors and why?

A	B	C	DRB1	DQB1
01:01	08:01	02:02	04:04	02:02
02:01	27:05	07:01	07:01	03:02

#1

Demographics Add/Remove Data	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1674-8952-5 Age: 22 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10=0 9/10=99 8/10=99	8/8=0 7/8=99 6/8=99	P M 0	P P 99	P P 99	A A 99	A A 99	01:ABGEP 24:ABGEW	08:YETY 27:EKN	02:ACMGS 07:AFXNW	04:04 07:01	02:02 03:02

#2

Demographics Add/Remove Data	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
1721-0857-3 Age: 23 Sex: M CMV: Untested Race(Eth): White (NHIS)	10/10=0 9/10=99 8/10=99	8/8=99 7/8=99 6/8=99	P P 99	P P 99	P P 99	A P 99	M P 0	01:ABGEP 02:ACMGD	08:YETY 27:EKN	02:ACMGS 07:AAAWT	04:04 07:FKP	03:ABGFU 03:YGKM

#3

Demographics Add/Remove Data	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
2016-8130-1 Age: 26 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10=0 9/10=99 8/10=99	8/8=0 7/8=99 6/8=99	A P 99	A A 99	A A 99	A M 0	P A 99	01:01 02:ANGA	08:01 27:05	02:02 07:01	04:04 03:01	02:01 03:02

Question 3

This is your only potential 10/10 donor. What would you say about its likelihood to match your patient?

A	B	C	DRB1	DQB1
01:01	08:01	02:02	04:04	02:02
02:01	27:05	07:01	07:01	03:02

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
5192-8635-5 Age: 48 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=47 9/10=93 8/10=99	8/8=78 7/8=99 6/8=99	P P 99	P P 99	78	A A 99	62	01:WUS 02:BKNS	08:BDZP 27:AHUV		04:04 07:01	

A. Not likely to match
B. Very likely to match
C. It's possible to be a 10/10 match, but should screen the donor at C and DQB1.

Question 4

When should you re-run your patient search?

    A. Once a month after the BMDW import

    B. You don't need to

    C. Before you formalize your patient search.

    D. A and C.

Question 5

How many donors are a potential 8/8 match or better?

10 Allele		8 Allele	AB Only
Donor:10/10 ABCDRDQ		**Total: 3**	
Select Row	**Mismatch**	**Count**	
☐ 1	None	3	
Donor:9/10 ABCDRDQ		**Total: 158**	
☐ 2	HLA-A	25	
☐ 3	HLA-B	36	
☐ 4	HLA-C	0	
☐ 5	HLA-DRB1	96	
☐ 6	HLA-DQB1	1	

Summary Counts | Search results as of: Oct 27 2017

View Donor Selections

Question 6

Given the HapLogic predictions on the NMDP list, which donors would you select for additional typing from the BMDW and why?   Patient typing:

Race(Eth): White - Unspecified (NHIS)

A	B	C	DRB1	DQB1
24:AWFDK 25:01	13:02 18:AUKHF	04:AWFDY 12:03	07:01 11:04	02:AWFEC 03:01

NMDP donor list:

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
SMS-540188 Age: 25 Sex: M CMV: Untested Race(Eth): Unknown ()	10/10	10/10=1 9/10=66 8/10=99	8/8=1 7/8=69 6/8=99	P A 99	A P 99	1	A A 99	96	24:02 25:01	13:02 18:01		07:01 11:04	
0534-8192-5 Age: 34 Sex: M CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=1 9/10=66 8/10=99	8/8=1 7/8=69 6/8=99	P P 99	P+ P+ 99	1	P P 99	96	24:AGVG 25:AD	13:DVB 18:AESY		07:APA 11:UBR	
5322-7955-1 Age: 45 Sex: F CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=66 8/10=99	8/8=1 7/8=69 6/8=99	P P 99	P P 99	1	P A 99	96	24:EKYX 25:GC	13:AFB 18:EJZN		07:FX 11:04	
0618-9349-1 Age: 52 Sex: F CMV: Untested Race(Eth): White (NHIS)	10/10	10/10=1 9/10=65 8/10=99	8/8=1 7/8=67 6/8=99	P+ P+ 99	P+ P+ 99	1	P+ P+ 99	97	24:AZVW 25:AD	13:DVB 18:AESY		07:APA 11:ARAP	

BMDW donor list:

Demographics Add/Remove Data	MCat	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
Canada-UBMDR Donor Count: 1	10/10	P P	P P		P P		24:FMRU 25:GKHC	13:YCJX 18:GMUK		07:FMAN 11:GEMD	
Polish Central Donor Count: 1	10/10	P P	P P		P P		s24 s25	s13 s18		07:XX 11:XX	
Polish Central Donor Count: 1	10/10	P P	P P		P P		24:XX 25:XX	13:XX 18:XX		07:XX 11:XX	
Slovakia Donor Count: 1	10/10	P P	P P		P P		24:XX 25:XX	13:XX 18:XX		07:XX 11:XX	

Question 7

Given the HapLogic predictions on the NMDP list, which BMDW donors would you select for typing, if any? And what would be the next steps?

Patient typing:

Race(Eth): White - North American (HIS)

A	B	C	DRB1	DQB1
02:01	35:12	04:01	04:07	03:02
66:01	49:01	07:01	11:02	03:19

A. I would ask for SSA.
B. None of these donors are likely to match, I would move on to potential 9/10 donors.
C. Request the Brazil donor for typing because of the patient race.
D. I would screen all of the potential 10/10 donors to make sure.
E. C, but I know this donor is unlikely to match so I would expect to move on to A or B.

NMDP donor list: Note- Race: Unknown will map to White

Demographics Add/Remove Data	MCat	Pr(n) of 10 (%)	Pr(n) of 8 (%)	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
ULM-20528 Age: 47 Sex: M CMV: Untested Race(Eth): White ()	10/10	10/10=1 9/10=2 8/10=9	8/8=1 7/8=2 6/8=9	P P 59	P P 1	73	P P 1	A P 99	02:XX 66:XX	35:XX 49:XX		04:XX 11:XX	03:02 03:01
SMS-396421 Age: 35 Sex: M CMV: Negative Race(Eth): Unknown ()	10/10	10/10=1 9/10=2 8/10=3	8/8=1 7/8=2 6/8=5	P P 10	P P 1	P P 99	P P 2	P P 81	s2 s26	s35 s49	s4 s7	04:XX 11:XX	

BMDW donor list:

Demographics Add/Remove Data	MCat	A	B	C	DRB1	DQB1	A	B	C	DRB1	DQB1
Portugal Donor Count: 1	10/10	P P	P P		P P		02:XX 66:XX	35:XX 49:XX		04:XX 11:XX	
Brazil Donor Count: 4	10/10	P P	P P		P P		02:XX 66:XX	35:XX 49:XX		04:XX 11:XX	
Brazil Donor Count: 2	10/10	P P	P P		P P		s2 s26	s35 s49		04:XX 11:XX	
Italy Donor Count: 2	10/10	P P	P P		P P		s2 s26	s35 s49		04:XX 11:XX	

Discussion

- What are your HLA difficulties when selecting a donor?

Summary

- Entering all HLA and non-HLA fields for a patient will ensure that Haplogic and Traxis present the best potential donors on a search

- Re-running a search frequently can help avoid missing a newly registered donor or one that has updated information

- Custom Criteria is a helpful tool used to narrow down a donor list or to filter with preferred HLA or non-HLA information

- ARS alleles are those that have their own unique name, but are not seen as immunogenetically different to other alleles

Summary

- Using the composite and locus predictions is important when trying to determine the likelihood of a potential donor matching.
  - Untyped loci
  - BMDW donors

- The patient race and ethnicity is important when searching for potential donors.

- If a 10/10 donor cannot be identified, alternatives or next steps may include:
  - 8/8 (9/10) DQB1 mismatch
  - Request Search Strategy Advice (SSA) to determine the best potential donors and/or cords for a patient

Questions

Evaluation Reminder

Please complete the Council Meeting 2017 evaluation in order to receive continuing education credits and to provide suggestions for future topics.

We appreciate your feedback!