



Overview of Cord Blood Searches from the Registry Perspective

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Recommended Guidelines




CME Article


Selection of unrelated donors and cord blood units for hematopoietic cell transplantation: guidelines from the NMDP/CIBMTR

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Guidelines for Cord Blood Unit Selection

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Selection Criteria

HLA Match

- $\geq 4/6$ HLA-A and -B antigen, -DRB1 high-resolution (traditional)
- $\geq 4/8$ high-resolution match

Cell Dose

- TNC $\geq 2.5 \times 10^7/\text{kg}$, CD34⁺ $\geq 1.5 \times 10^5/\text{kg}$ (single)
- TNC $\geq 1.5 \times 10^7/\text{kg}$, CD34⁺ $\geq 1.0 \times 10^5/\text{kg}$ (double, per unit)

Bank Practices

- RBC reduced
- Cryovolume 24–28mL/bag
- Year of cryopreservation
- Attached segment for identity testing

New Patient Entry

Create New Patient



Default search preferences for a preliminary search include 7/8 or better donors, cord blood units, and adult donor cryopreserved products

Search Preferences

* Search Criteria

Donors

Cords

Adult Donor Cryopreserved Products

Search Strategy Advice (SSA)

Request SSA (form will open after submitting patient)

Free personalized advice to identify the best matched sources for your patient.

Cancel

Save in Progress

Submit

Search Results

- Cord blood units must be at least a 4/6 antigen matched at HLA-A, -B, and -DRB1 to be listed as a potential match on the Search Results
- Grouped in match categories from 6/6 down to 2/6

MCat x/6	Pr(n) of 8 (%)		Pr(n) of 6 (%)	A	B	C	DRB1
3/6	8/8=0 7/8=0 6/8=0	5/8=1 4/8=12 3/8=42	6/6=0 5/6=0 4/6=0	● P 01:XX ● P 03:XX 99%	● P 15:XX ● M 35:XX 0%	1%	● M 13:02 ● L 04:04 0%
4/6	8/8=0 7/8=0 6/8=0	5/8=99 4/8=99 3/8=99	6/6=0 5/6=0 4/6=99	● P 01:EKFWN ● M 02:ENHWP 0%	● P 15:EENCG ● M 35:EJJPJ 0%	● P 03:EJJPY ● M 04:EKFWU 0%	● P 01:01:01G ● P 04:01:01G 99%
3/6	8/8=0 7/8=0 6/8=0	5/8=0 4/8=0 3/8=99	6/6=0 5/6=0 4/6=0	● P 01:01:01G ● M 02:06:01G 0%	● L 15:30:01 ● P 40:AUKJZ 0%	● P 03:BCZHJ ● M 01:AWFCB 0%	● M 04:04:01 ● L 04:ASXKT 0%
3/6	8/8=0 7/8=0 6/8=0	5/8=0 4/8=99 3/8=99	6/6=0 5/6=0 4/6=0	● M 02:01:01G ● A 03:01 0%	● M 35:01:01G ● A 40:01 0%	● A 03:04 ● M 04:JKTU 0%	● P 01:AUCN ● L 04:04:01 0%
4/6	8/8=0 7/8=0 6/8=0	5/8=99 4/8=99 3/8=99	6/6=0 5/6=0 4/6=99	● M 02:XX ● P 03:XX 0%	● M 35:XX ● P 40:JKT 0%	● P 3 ● M 4 0%	● A 01:01 ● A 04:01 99%
4/6	8/8=0 7/8=0 6/8=1	5/8=99 4/8=99 3/8=99	6/6=0 5/6=0 4/6=99	● M 02:ATPM ● P 03:ANGP 0%	● M 35:AUEN ● P 40:AUCR 0%	1%	● A 01:01 ● A 04:01 99%

Default Cord Sort

6 Traditional, then TNC, then CD34⁺

To change the cord sort, select your desired primary sort order from the **Sort by** drop-down list:

- 6 Traditional (antigen match at HLA-A and -B, allele and antigen match at HLA-DRB1)
- 8 Allele Match (likelihood of being an allele match at HLA-A, -B, -C, and -DRB1, grouped by match probability buckets)
- TNC
- CD34⁺

Then, select your desired second and third sort

Search Results 4,400

Orange, Olivia / 540-979-5

Phenotype 1 (Actual) Local ID TC ID 515 Patient Status PRLM

Age 31 Sex F ABO/RhD A+ CMV Negative A 03:01:01 B 35:03:01 C 04:01:01 DRB1 11:01:01 DQB1 03:01:01G DPB1 02:01:02 Transpla Between As of M/

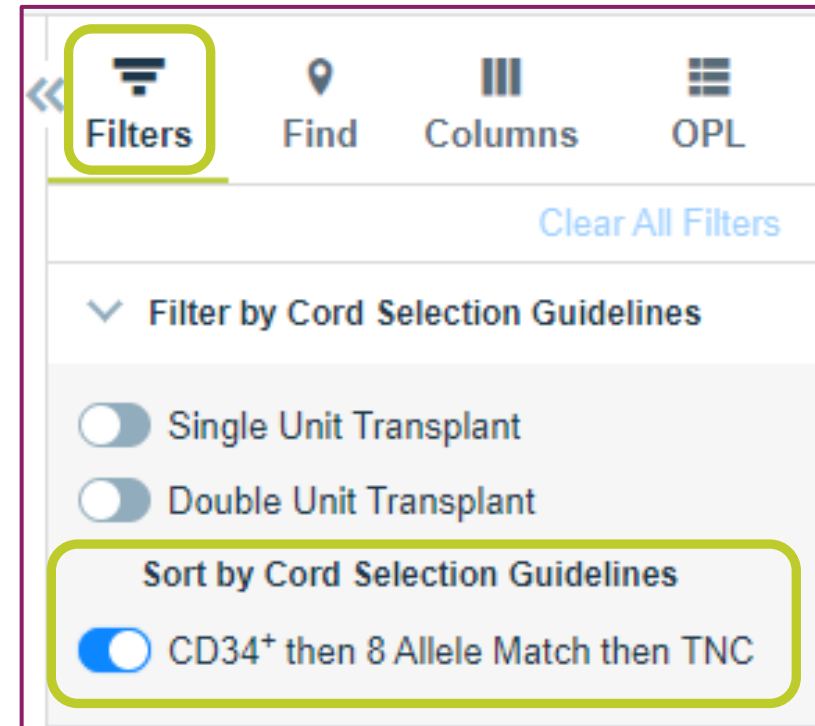
More Details

Cords Classic View Sort by 8 Allele Match then TNC then CD34 Request Unit Report

Export/UnitRpt	OPL Cart	Ref	Status	Country	List REG/CBB ID	ID Race (Eth)	TNC CD34	Prev CT Licensure	DOB Sex	Final Prod Vol ABO/RhD	MCat x/8	MCat x/6	Pr(n) of 8 (%)
<input type="checkbox"/>	+	1	AV	US	NMDP 174	9992-0322-8 White (UNK)	114 5.1	N UNL	MAY 2000 F	O+	7/8	5/6	8/8=0 7/8=99 6/8=99 4/8= 3/8=
<input type="checkbox"/>	+	2	AV	CA	WMDA 6912	111804 White (UNK)	164 6.7	N UNL	AUG 2014 M	25 A+	7/8	5/6	8/8=0 7/8=90 6/8=99 4/8= 3/8=
<input type="checkbox"/>	+	3	AV	US	NMDP 166	9977-0004-3 White (NHIS)	94 2	N UNL	FEB 2009 F	75 A+	7/8	5/6	8/8=0 7/8=88 6/8=99 4/8= 3/8=
<input type="checkbox"/>	+	4	AV	IT	WMDA 7450	0608601396 Unknown (UNK)	119	N UNL	FEB 2008 F	62 A+	7/8	5/6	8/8=0 7/8=11 6/8=51 4/8= 3/8=
<input type="checkbox"/>	+	5	AV	IT	NMDP 7450	0608601396 Unknown (UNK)	119	N UNL	F	62 A+	7/8	5/6	8/8=0 7/8=11 4/8= 3/8=

Sort by Cord Selection Guidelines

- **Sorting by the cord selection guidelines is recommended for patients with malignant diseases.**
- The easiest way to apply the cord selection guidelines sort is to:
 - Click **Filters** from the left side panel
 - Select the **CD34+ then 8 Allele Match then TNC** option in the Filter/Sort by Cord Selection Guidelines section



In-app guidance

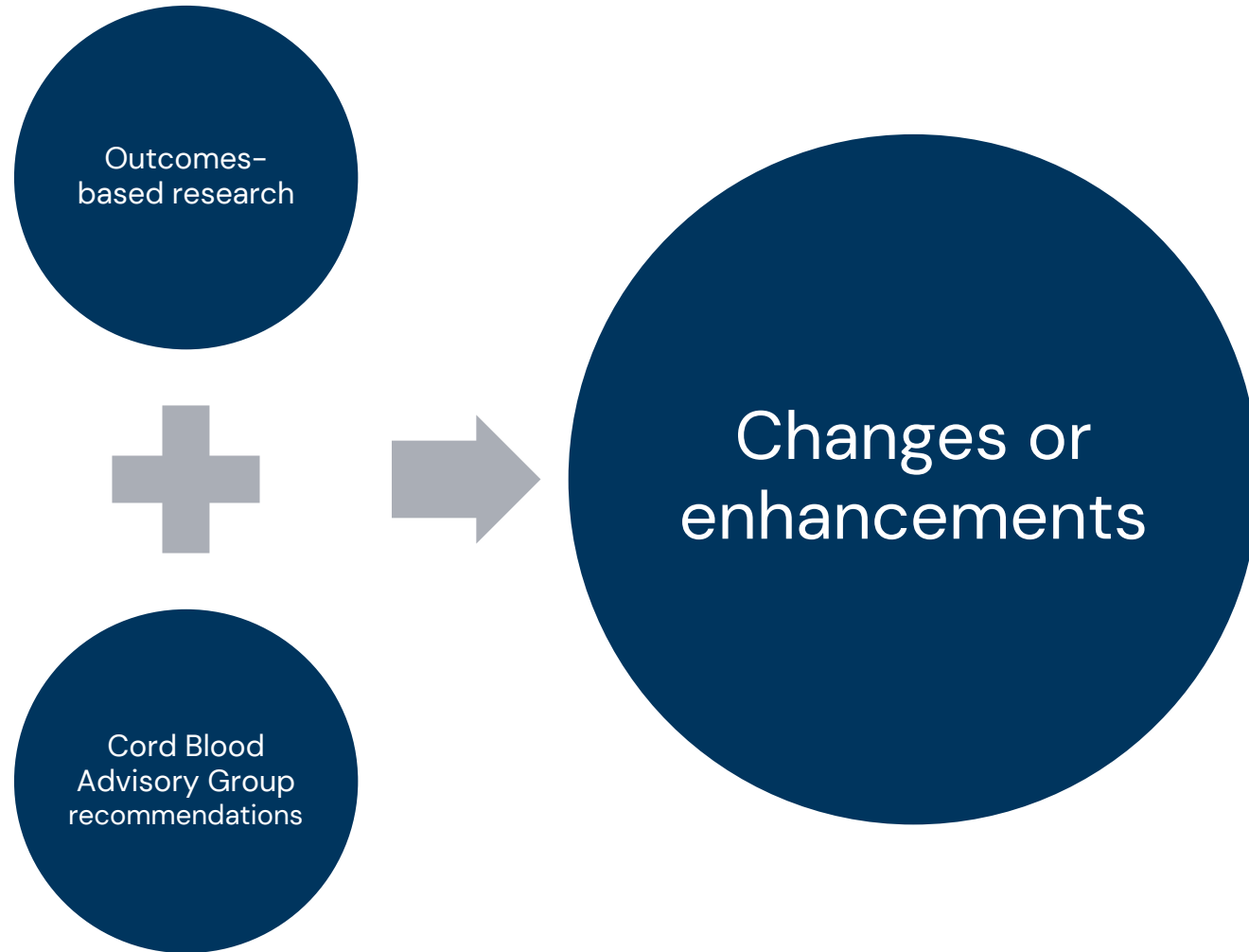
Provides in-the-moment guidance and support to drive adoption, proficiency, and engagement

When filters are toggled off for Single and Double Unit Transplant:

- Filter panel auto-opens when user lands on Cord Search Results page
- SmartTip appears with orange highlight

The screenshot displays the nmdp MatchSource Workflow Manager interface. At the top, the nmdp logo and 'MatchSource' are on the left, and 'Workflow Manager' is on the right. Below the header, the page title is 'Search Results' with a count of '198'. A patient profile is shown: 'Example, Patient / 123-456-7' with 'Phenotype 1 (Actual)'. A table of search results is visible with columns for Age, Sex, ABO/RhD, CMV, A, and B. A filter panel is open on the left, showing two toggles: 'Single Unit Transplant' and 'Double Unit Transplant', both of which are currently turned off. A 'SmartTip' overlay with an orange background and a question mark icon is positioned over the filter panel. The text in the SmartTip reads: 'Search results may include units that do not meet NMDP/CIBMTR selection guidelines. Apply the **Single Unit Transplant** or **Double Unit Transplant** toggle to filter search results to include only units that meet selection guidelines. [Learn More About Cord Selection Guidelines](#)'. Below the SmartTip, the filter panel also includes a 'Sort by Cord Selection Guidelines' option and a 'CD34+ then 8 Allele Match then TNC' toggle. The bottom of the filter panel has a 'Lists' button. The background table shows several rows of search results with columns for checkboxes, plus signs, shopping cart icons, and numerical values.

Potential Changes



Cure-Ready

Cure-Ready CBUs can be especially useful when transplant is urgent

- HLA confirmatory typed using high-resolution NGS technology
- Release testing successfully completed, eliminating the 14-day wait for testing results and subsequent quality clearance

List REG/CBB ID	ID Race (Eth)	TNC/kg CD34/kg	TNC CD34	Cure-Ready	Prev CT Licensure
NMDP 156	9894-1516-2 White (NHIS)	3.94 4.17	315 33.4	Y	Y LIC
NMDP 173	9844-6156-7 White (NHIS)	3.13 2	250 16	Y	Y UNL
NMDP 195	9773-9470-0 White (NHIS)	2.8 1.04	224 8.3	Y	Y LIC

NMDP Resources



Search Strategy Advice

- Donor and cord blood unit selection recommendations using published guidelines and TC criteria



Cord Blood Consultation

- Connect TC with experienced CB transplant clinician to provide guidance on cord transplant
- Advice on unit selection
- Support with pre- and post-transplant care



Cord Blood Practice

- Practice units for process validation and management of thaw procedures
- Additional resources on Network site:

<https://network.nmdp.org/partners/transplant-centers/cord-blood-transplant>