

Now in its 25th year, the National Marrow Donor Program® (NMDP) maintains a centralized repository for the collection, processing and distribution of research samples to advance hematopoietic stem cell transplantation. The majority of samples are from matched unrelated donors and transplant recipients being treated for leukemia, lymphoma and other life-threatening diseases.

46 DONOR CENTERS participating 89% sample submission in 2011
2% valid sample excuse

40,000 Unique Donors

Pre-collection Blood Sample

Donor Demographic Data

- Normal, healthy donors
- Race, ethnicity, age, gender

15,000 donors without recipient pair 25,000 donors with recipient pair

21 CORD BLOOD BANKS participating 92% sample submission in 2011
4% valid sample excuse

5000 Unique Cord Blood Units

CBU Sample

- Segment
- Filter paper
- Red cell pellet

CBU Data

- Race, ethnicity
- Maternal information

2000 CBUs with recipient partner 3000 CBUs without recipient partner

25,000 DONOR/RECIPIENT PAIRS and **2000 CORD/RECIPIENT PARTNERS**

13,000 recipients without donor or CBU pair 25,000 recipients with donor pair 2000 recipients with CBU partner

40,000 Unique Transplant Recipients

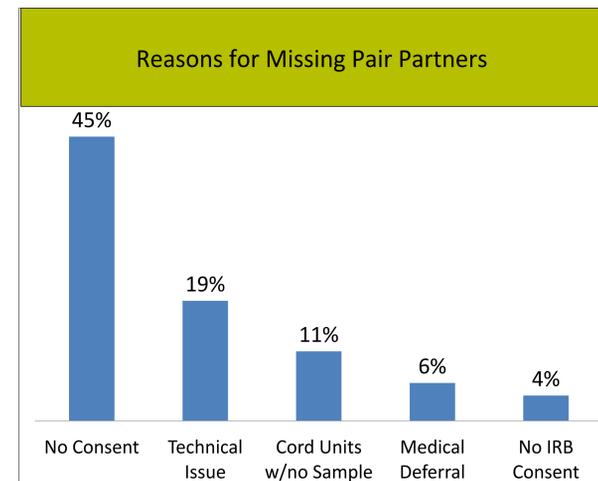
Pre-transplant Blood Sample

Recipient Baseline Data and Demographic Data

- Disease and status
- Race, ethnicity, age, gender
- Treatment regimen

127 TRANSPLANT CENTERS participating 91% sample submission in 2011
4% valid sample excuse

[23 BMT CTN transplant centers submit related donor/recipient samples]



Selected Aliquot Types (1,370,000 total aliquots)

Whole blood	B cell lines
Whole blood with DMSO	Peripheral blood mononuclear cells
Plasma, serum	DNA
Blood on filter paper	Granulocytes

Data Set Example

HLA Data Set

HLA-A	HLA-B	HLA-C	HLA-DRB1	HLA-DQB1	HLA-DPB1
02:01	07:02	07:02	15:01	06:02	04:02
29:02	44:03	16:01	07:01	02:01	11:01

KIR Data Set *

2DL1	Present	2DS3	Absent
2DL2	Absent	2DS4	Present
2DL3	Present	2DS5	Present
2DL4	Present	3DL1	Present
2DL5	Present	3DL2	Present
2DS1	Present	3DL3	Present
2DS2	Absent	3DS1	Present

*High resolution KIR typing is also available for 435 samples

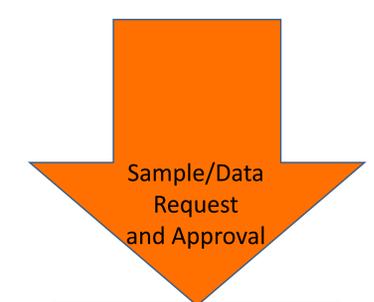
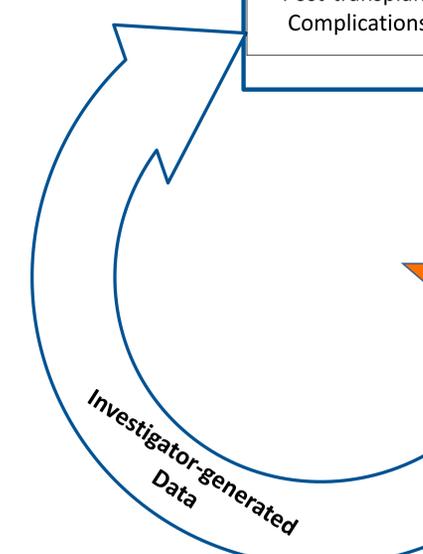
Data Points for Demographics, Treatments, and Long-term Outcomes

Race, ethnicity	Age, Gender	CMV Status
Age at Transplant	Karnofsky Score	Conditioning Regimen
Graft Type	Graft Manipulation	Subsequent Transplant
Disease at Transplant	Disease Status at Transplant	GVHD Prophylaxis
Post-transplant Complications	Long Term Follow-up	Survival, Disease-free survival

1,370,000 Sample Aliquots In Inventory

NMDP/CIBMTR Enrichment of Sample Characterization (HLA, KIR)

Transplant Center Enrichment of Recipient Transplant Outcomes



Research Question Analysis

More than 12,000 samples are shipped annually to researchers.

Sample and data distribution are facilitated through the NMDP research affiliation, the Center for International Blood and Marrow Transplant Research.

Contact Res-repos@nmdp.org or visit www.cibmtr.org/samples for information on access to this international resource.