

Labeling of Cellular Products with  
Unique Product and Patient Identifiers  
When Products Are Intended for Further Manufacture by a  
Contract Organization or Study Sponsor

Stakeholder Associations:

AABB

American Association Tissue Banks

American Society for Blood and Marrow Transplantation

Foundation for the Accreditation of Cellular Therapy

ICCBBA

CTLM Meeting  
Bethesda, MD  
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Legal & Regulatory Affairs Committee

# Agenda

- Why cellular products should not be treated as routine “Off the Shelf” drugs
- Current Labeling Practice for Cellular Products amongst accredited laboratories (AABB, FACT, CAP)
- Labeling workarounds developed for “off-site” manufacturing of novel cellular products
- Examples of near misses
- Request from clinical sites, accrediting agencies, and ICCBBA



# Sources of Cellular Products

- Patient-specific
  - Autologous donors
  - HLA-matched allogeneic donors (related or unrelated)
- Not patient-specific
  - Partially HLA-matched but not an actual “directed” collection, could be considered “Off the Shelf”
- Product identity testing
  - No real time serological or antigen testing to confirm identity of product to a specific patient
  - Serologic HLA testing / matching done weeks prior to collection
- Reliance on labeling and identifiers to confirm identity
  - Matching based on donor / patient identifiers linked to HLA testing results

# Bar-coding of Cellular Products and Patient Information for Documentation and Confirmation

## Patient Identifier:






Infusing institution's medical record number and patient name bar-coded onto the Cell Infusion Record

 <b>DANA-FARBER</b> CANCER INSTITUTE		Cell Manipulation Core Facility Dana-Farber Cancer Institute 450 Brookline Avenue Boston, MA 02215			
<b>PATIENT INFORMATION:</b>		<b>CELL INFUSION RECORD</b>			
PATIENT NAME: FTDFCILAB, CAROLYN DFCI MRN: 923652 DOB: 01/07/1973 LOC: DFYBI Comment:		ACC NO: T20002565 97075287 ABO/RH: A-Positive Other MRN: 97075287			
<b>PRODUCT INFORMATION:</b>					

- Unique Product number
  - **W1221 16 123123**
  - **Traceability from donor to patient and back in eMR**
- Standard Product Codes
  - **S28474BO**
  - Standard product types in eMR for data gathering, outcomes
- Bar-coding for easy scanning into eMR

## Product Identifiers:

All products have:  
 Unique ISBT compliant product Identifiers ,  
 Bar-coding of Product Type and modifiers  
 Bar-coding of Expiration and ABO/Rh

 <b>W1221 16 123123</b> <b>S</b> <b>G</b>		 <b>O Rh Positive</b> <b>4700</b>	
Brigham & Women's Hospital Boston, MA FEI# 0001277447			
Collection Date/Time  09 Jun 2016 13:12 EDT (09 Jun, 2016 17:12 UTC)		For Use by Intended Recipient(s) Only Unrelated Donor Donor ID: 1234-5678-9	
<b>Do Not Irradiate</b> <b>Do Not Use Leukoreduction Filter</b>		 Expiration Date/Time 0161631312 11 Jun 2016 13:12 EDT (11 Jun, 2016 17:12 UTC)	
 S28474BO DESIGNATED <b>HPC, APHERE SIS</b> Mobilized, CD34 enriched		Intended Recipient FTDFCILAB, CAROLYN Recipient ID: BWH 97075287	
See Attached Documentation for Details Total Volume <u>99.5 mL</u>			
Store between 20 to 24 C Part: B0		CMCF Dana-Farber Cancer Institute 450 Brookline Ave Boston MA 02215 FEI# 3003934255	

An Example where Sponsor and CMO will accept PHI  
Institutional Labels with PHI can be applied, but PHI is not bar-coded

## Leukapheresis Collection

MONONUCLEAR CELLS (MNC) BY APHERESIS  
FOR FURTHER MANUFACTURING USE  
FOR AUTOLOGOUS USE ONLY  
NOT EVALUATED FOR INFECTIOUS SUBSTANCES

11/6/15

First Name: Mick  
Last Name: Mouse  
Date of Birth: 29 / FEB / 1945

Subject Number: 015001-1234-0000  
JOIN: 150012345

REF 10120 LOT 09Y3110

DC00010120 00009Y3110

DFCT MRW -  
TPN - 777815-129  
BWT MRW -



## Final Label at Receipt for Infusion

NCT Product Bag X  
Vol: 60 mL Store: -130°C (or colder)  
Manufacture Date: DD-MMM-YYYY Expires: DD-MMM-YYYY  
**Important:** Each Product bag must be completely infused  
within 3 hours from removal from the shipping box

First Name: First  
Last Name: Last  
DOB: DD-MMM-YYYY  
Subject #: TBD  
JOIN/LOT: YYXX71186

Mick  
Mouse  
29/Feb/1945

FOR AUTOLOGOUS USE ONLY  
NOT EVALUATED FOR INFECTIOUS SUBSTANCES  
Caution: New Drug - Limited by United States law to investigational use

Mouse, Mick 123123 DOB 2/29/1945



W1202 15 500550 8

PHI (protected health information)

Use of Institutional label applied at collection

# Various Labeling Formats and Practices for “Off-Site” / Commercially Prepared Cellular Products

Not Test for Biohazard

Caution New Drug – Limited by Federal Law  
For Investigational Use Only

Autologous Tumor NCT Product  
Patient ID: xx-0000  
Product # 1234567 Vol 1.2 mL Vial 1  
Date Manufactured 7/1/16  
Sterile Store in Vapor LN2 phase

- Label format varies with each company
  - Private manufacturers are not accredited and are not required to follow standard cellular product labeling standards such as ISBT-128
  - Autologous and directed HLA-matched cellular products are being labeled as drug products BUT should be handled as autologous and directed blood products following ISBT-128 format
- Many sponsors refuse to use patient identifiers making it impossible to use without relabeling of product at infusion
  - Unable to scan product into eMR for positive patient identification
  - Those manufacturing under IND often use study numbers that are not a unique number nor can they be found in the patient's eMR
- Products often need to be deidentified when shipped out and reidentified / labeled when received back
  - Increased risk of error in properly linking the product to the intended patient

# The Re-Labeling Cycle

W1221 15 00004 S [1]

Brigham & Women's Hospital  
Boston, MA

Collection FEI# 0001277447  
Date/Time 0153011557  
28 Oct 2015 15:57 EDT  
(28 Oct 2015 19:57 UTC)

For Autologous Use Only

TEST, SOTIO  
Donor ID: DF 123456

Do Not Irradiate  
Do Not Use Leukoreduction Filter

Expiration Date/Time  
28 Oct 2015 15:57 EDT  
(28 Oct 2015 19:57 UTC)

Donor/Recipient  
TEST, SOTIO  
Recipient ID: DF 123456

See Attached Documentation for Details  
Total Volume 5 mL

Store at 1 to 10 C

Caution: New Drug—Limited by United States law to investigational use.

University Hospital Motol  
Prague, Czech Republic  
SUKL# 21 442/2/INS/07

W1221 15 00004 S [1] 6400 A Rh Positive

Brigham & Women's Hospital  
Boston, MA

Collection FEI# 0001277447  
Date/Time 0153011557  
28 Oct 2015 15:57 EDT  
(28 Oct 2015 19:57 UTC)

FOR AUTOLOGOUS USE ONLY

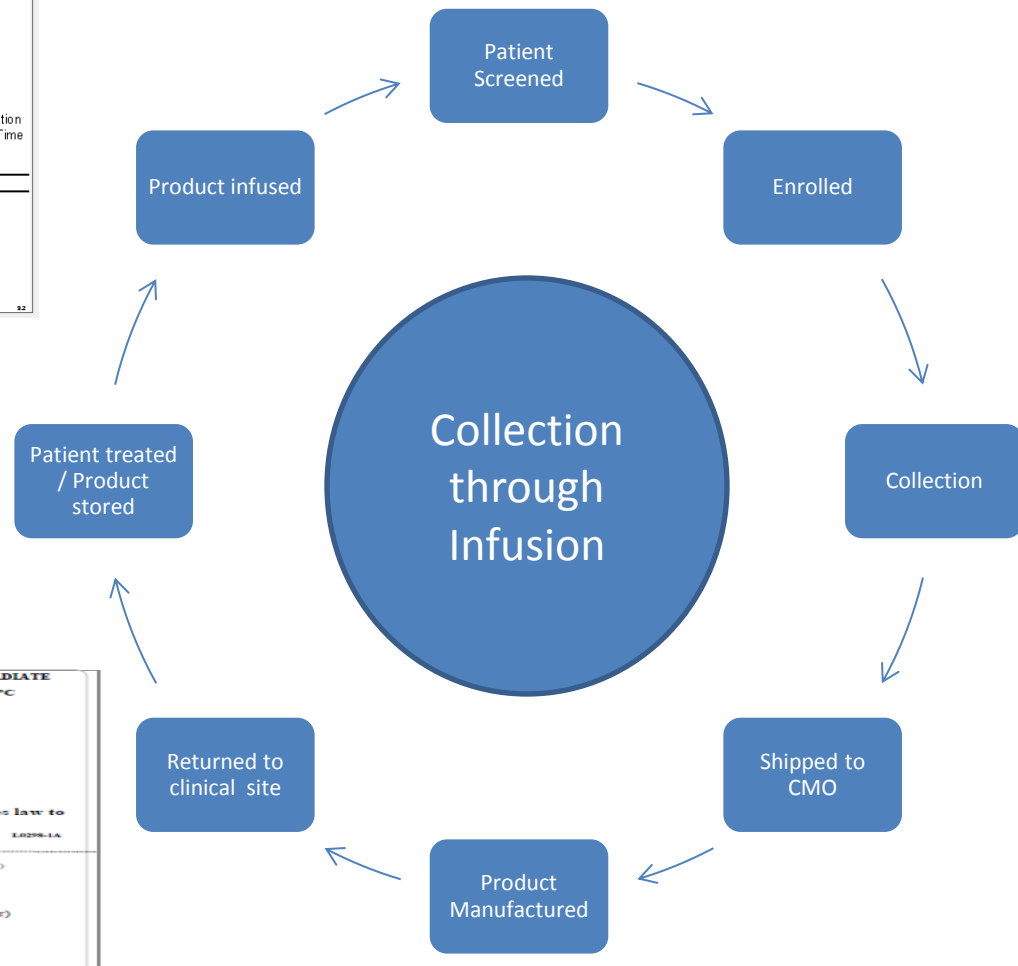
TEST, SOTIO  
Donor ID: DF 123456

Do Not Irradiate  
Do Not Use Leukoreduction Filter

Expiration Date/Time  
28 Oct 2015 15:57 EDT  
(28 Oct 2015 19:57 UTC)

Donor/Recipient  
TEST, SOTIO  
Recipient ID: DF 123456

Total Volume 205 mL  
containing 20 mL Citrate  
Store at Room Temperature



**FOR AUTOLOGOUS USE ONLY- DO NOT IRRADIATE**  
Store in vapor phase of liquid nitrogen -150°C

Manufactured: Disney Land  
23 Cinderella Road, Happy Ville, FL

Caution: New Drug—Limited by United States law to investigational use.

Investigator Name: Dr. \_\_\_\_\_ (FIRST/LAST)  
Subject ID#: \_\_\_\_\_ (000-XXX-XXX)  
Subject Initials: / / (FIRST/MIDDLE/LAST)  
Subject Name:  N/A (FIRST/MIDDLE/LAST)

Subject DOB: \_\_\_\_\_ (DDMM/YYYY)  
Apheresis Collection Date: \_\_\_\_\_ (DDMM/YYYY)  
Subject Screening Weight (kg): \_\_\_\_\_ kg (XXX.X)  
Date of Manufacture: \_\_\_\_\_ (DDMM/YYYY)

VOL: \_\_\_\_\_ XXX mL  
See Certificate of Analysis for dose and shelf life.

Subject ID#: \_\_\_\_\_

Subject Initials: FIRST \_\_, MIDDLE \_\_, LAST \_\_

Subject Name:  N/A

First Middle Last

Subject DOB: D D / M M M / Y Y Y Y

Subject Weight (on day of Leukapheresis): \_\_\_\_\_ kg

Institution Name: \_\_\_\_\_

Leukapheresis Collection Date: D D / M M M / Y Y Y Y

Leukapheresis Completion Time: \_\_\_\_\_ Time Zone: \_\_\_\_\_  
(Military Time) H H M M

Leukapheresis Collection Volume (approximate): \_\_\_\_\_ mL

DIN:  N/A

Affix DIN Label Here  
(if applicable)

# Some Products Require Final Packaging and Relabeling

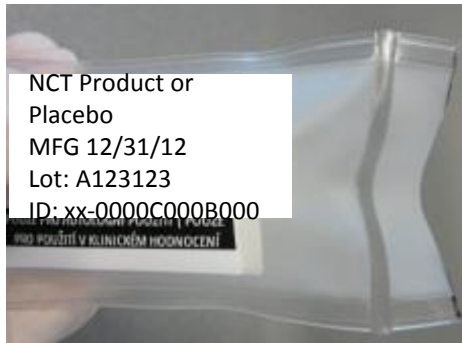


Figure 18: Secondary Label

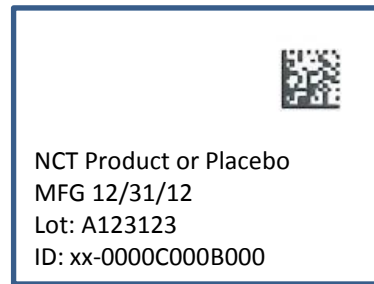
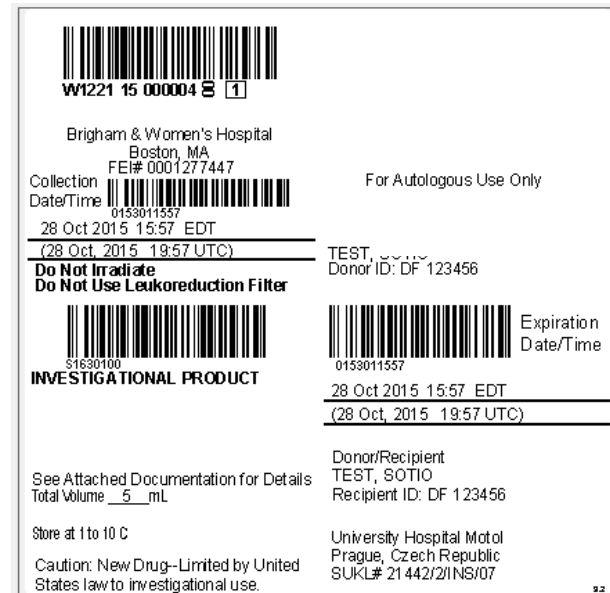
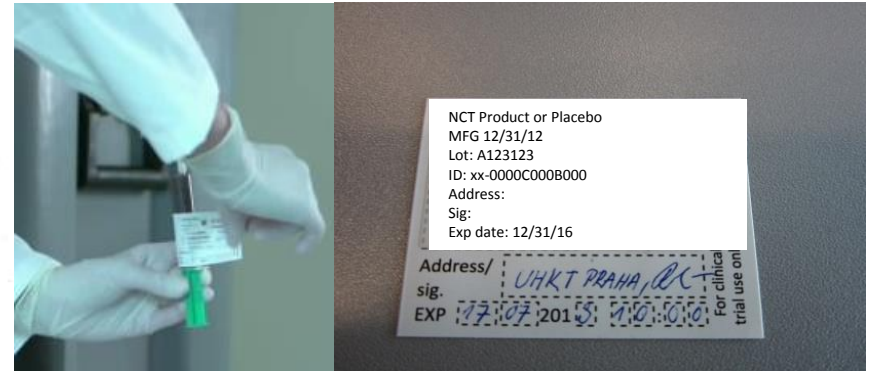


Figure 19: Primary Labels (x3)





# Requirements for Infusion / Use

- Accreditation standards & clinical team require:
  - patient's name and
  - two unique identifiers also found in medical record
- To enhance patient safety, the move is to scan the following into the patients e-Medical Record along with the patient identifiers listed above:
  - Product unique identifier / lot
  - Product code and attributes
  - Unique aliquot, if applicable
  - Expiration date and time



# Use of Patient Identifiers, HIPAA and Rationale Companies Use to avoid Using PHI

- “Not allowed to have access to PHI, under HIPAA”
  - Especially if product is under an IND
- Legal Statutes
  - Privacy Rule is to ensure that individuals’ health information is properly protected while allowing the flow of health information needed to provide and promote high quality health care and to protect the public's health and well being.
  - Authorization of PHI access can be disclosed in consent
  - Language can be added to sponsor / CMO agreements & contracts for use of PHI
  - PHI can be used by third parties for research products if approved by IRB

# Example 1 – Near Miss

- Autologous MNC products from two patients on same trial from same institution are collected and de-identified post collection
- The following information represented the unique identifiers used (Pt initials – study #-enrollment # and DOB)
  - Product #1 MS – 16034-01 5/1/56
  - Product #2 MS – 16034-02 12/15/55
- CAR-T Products returned
  - MS – 16034-01 12/15/55
  - MS – 16034-02 5/1/56
- Reliant on labeling and identifiers to confirm identity
- No real time serological or antigen testing to confirm identity
- Products could not be used. Error reported to sponsor.

# Example 2

- Require Sponsor & CMO to label products with:
  - Patient's name
  - Medical Record Number
  - DOB
- Without notification changed their policy and sent a product without identifiers
- Urgent situation created of not being able to use the product as delivered
- Finally CMO was able to provide documentation linking the product lot number back to the patient and unique identifiers

# Marriage of both USAN / NDC and ISBT128

**ISBT 128  
Coding  
for USAN**

USAN  
Terminology  
and NDC



ISBT 128  
Coding and  
Labeling



Donation  
and  
Standardized  
Product  
Information

Electronic capture



- Donation Identification Number
- Standardized Product Code (USAN+Donation Type+Divisions)
- Patient Identification Number
- Expiration Date and Time
- Lot Number



# Desired Outcome of This Meeting



- To inform the agency about patient safety risks that is a current and growing concern amongst healthcare providers with advent of manufacturing by industry / commercial CMOs.
  - Unique and traceable product and patient identifiers are not being used.
- To recommend that we work towards using common healthcare standards (AABB, FACT, ISBT 128) regardless of the point of manufacturing for tracking and labeling of cellular product.
  - The use of common standards set forth by accreditation agencies will improve safety, standardize practice and reduce risk of product/patient misidentification.
- To develop working subgroups (the Agency, industry commercial CMO partners, software partners, and accrediting agencies) to educate why moving to common ISBT-128 labeling practices is a win for everyone.
  - Will benefit those developing electronic medical records and cellular manufacturing systems.
  - Will ultimately provide safer products by ensuring the right product gets to the correct patient.

# References

- AABB Standards for Cellular Therapy Services, 7th edition
- FACT-JACIE International Standards for Hematopoietic Cellular Therapy, 6th edition
- FACT - STANDARDS FOR IMMUNE EFFECTOR CELL ADMINISTRATION, 1<sup>st</sup> edition - Draft
- ICCBBA – ISBT 128 Cellular Therapy Standard Labeling formats and nomenclature