



# ***ISBT 128* Standard**

**Cellular Therapy Product Coding Transition**

**Version 1.3.0**

**June 2008**

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# Cellular Therapy Product Coding Transition

## Table of Contents

1	Background .....	4
1.1	Rationale for Changes to Terminology .....	4
1.2	The Issues .....	5
1.3	Key changes .....	5
2	Progenitor Cells (HPC) .....	7
2.1	Class .....	7
2.2	Modifier .....	10
2.2.1	Bounded List and Definitions .....	10
2.3	Attribute .....	12
2.3.1	Core Conditions .....	12
2.3.2	Groups and Variables .....	15
2.3.3	Variables – bounded lists and definitions .....	17
2.4	Product Code Description Table .....	26

# 1 Background

This document serves as a bridge between the *ISBT 128* Standard coding system for Cellular Therapy products collected before a new coding system was developed in June 2007 and those collected after the new system was implemented. It is intended to be used to assist the user in understanding the differences between the two systems. Facilities should move to the newer terminology for products as soon as is reasonably possible.

This document assumes knowledge of the *ISBT 128* product description coding system. This information may be obtained from the following documents:

*ISBT 128 Standard Technical Specification*  
*ISBT 128 Standard Product Code Structure and Labeling (Cellular Therapy)*  
*Standard Terminology for Blood, Cellular Therapy, and Tissue Product Descriptions*

This document is NOT intended to be used as a guide to the current coding of cellular therapy products. Users should refer to the *Standard Terminology for Blood, Cellular Therapy, and Tissue Product Descriptions* to select appropriate codes for products and to request new product codes.

## 1.1 Rationale for Changes to Terminology

*ISBT 128* coding for Cellular Therapy products was initially developed during the 1990s. Since that time, the field of Cellular Therapy has grown dramatically. Recognizing the need to expand and revise the existing coding system, an international advisory group, the Cellular Therapy Coding and Labeling Advisory Group (CTCLAG), was created to review and expand the standard. CTCLAG included representatives from the following organizations: AABB, American Society for Blood and Marrow Transplantation (ASBMT), American Society for Apheresis (ASFA), European Group for Blood and Marrow Transplantation (EBMT), Foundation for the Accreditation of Cellular Therapy (FACT), ICCBBA, International Society of Blood Transfusion (ISBT), International Society for Cellular Therapy (ISCT), ISCT Europe, Joint Accreditation Committee of ISCT and EBMT (JACIE), National Marrow Donor Program (NMDP) and the World Marrow Donor Association (WMDA).

CTCLAG attempted to remove complexity and redundancy from the existing coding system wherever possible and, because the group included representation from relevant organizations, was able to agree to terminology acceptable to all for inclusion in future publication of standards and guidance.

## 1.2 The Issues

Modifiers and attributes previously available to register new products made it possible to describe the same product in several ways by using different combinations and resulted in significant duplication of product codes in the database. Particular issues included:

- Users were able to describe divisions of a single product using the attribute “final product additional information” rather than using the 7<sup>th</sup> and 8<sup>th</sup> characters of the final product code. This resulted in some products having up to 15 additional codes assigned unnecessarily, and a great deal of additional documentation for the users.
- The available ways to describe preservatives and additives allowed both vague or detailed descriptions (citrate, CPDA-1) and some additives (e.g., DMSO and Heparin) appeared in more than one group.
- Later additions to the list of attributes did not use consistent terminology and some were not compatible with other published standards.
- Differing interpretations of open/closed processing between users and the use of “closed” as the default has resulted in many products coded as both open and closed, including some where the necessary technology was not available to produce the product in a closed system.

## 1.3 Key changes

**Classes:** Cellular therapy products are divided into two class name categories.

Category 1:

At collection, the product code will describe the intended purpose of the collection (TC or HPC) and the source material (e.g., TC, Apheresis). These products can be collected for direct infusion without further manipulation. If these cells undergo manipulation such as cryopreservation and thawing, the class doesn't change but the modifier is added into the product code (e.g., Cryopreserved HPC, Apheresis). This category is usually identified by a comma in the full name

Category 2:

After manufacture/processing, the intention of the product can be identified by its active component. These class names are based on function followed by a further more specific delineation of the type of cells thought to predominate in the product. After processing, the class name will describe the intended active component (e.g., a donor lymphocyte infusion identified as TC-T Cells). This category is usually identified by a hyphen in the full name

**Modifiers:** Some have been removed or amended due to redundancy, duplication (as attributes), or possibilities for misuse (e.g., Frozen versus Cryopreserved). We have also introduced some new Modifiers. These will enable users to better describe products where the donor has been mobilized with cytokines and the intrinsic biological activity of the donation may have been altered. It will be the responsibility of the users to include details of mobilizing

agents with accompanying issue paperwork. The rapid developments in the field and number of alternatives preclude coding all additives individually.

**Attributes:** Some groups have been removed, most have been simplified and opportunities for duplication have been restricted. We have recognized that system integrity has not been interpreted consistently; as it does not affect the expiry of these products the group has been suspended. Because of this, a “closed” attribute was given to product description codes assigned under the old system that had the default value of “closed”.

Because of its inconsistent detail, the Preparation—Additional Information groups has been suspended.

It will also no longer be possible to describe product divisions within the database assigned number which comprises the first five characters of the final product code; the proper way to do this in *ISBT128* is with the 7<sup>th</sup> and 8<sup>th</sup> characters. Thus the Final Product: Additional Information group has been suspended.

A new group, Cryoprotectant, was added to encode the cryoprotective agent.

As with Modifiers, the number of alternative additives and combinations available preclude individual coding so we have introduced three new groups:

Additional donor exposure: To identify products where there is use of third party blood components

Other Additives: To identify products where other additives are present

Genetically Modified: Cells which have been modified by the insertion of exogenous genetic material.

The user is responsible for full documentation of third party blood components, other additives, and genetic modifications in the accompanying paperwork.

For the most part, the new terminology is backwards compatible. The only exception is the modifiers “Thawed” and “Washed.”

Term	Old Definition	New Definition
Thawed	Describes a product that is currently in the liquid state and has been previously frozen	Applies to cryopreserved cells that have been thawed without washing prior to final issue for administration
Washed	Describes a product that has been washed to remove any anticoagulant or cryopreservative solutions	Applies to cells from a non-cryopreserved product that have been washed to reduce the amount of plasma, anticoagulant, and/or other solution(s)

In this case, facility records should provide adequate documentation of the process by which the component was produced.

## 2 Progenitor Cells (HPC)

Tables that follow provide a mapping between the old coding system and the new. Where definitions have been modified, both the old and new definitions appear. Where terms have been discontinued, “not used” appears in the “New Definition” columns. Where new terms have been added, “not used” appears in the “Old Definition” columns.

In a few situations, terminology was used but not defined in the old system. In this case, the phrase “not defined” appears in the “Old Definition” column.

Classes, Modifiers, and Attributes that lack a new definition should not be used for new products. These codes are retained for backward compatibility of products in storage and for interpretation of records.

### 2.1 Class

Term	Old Definition	New Definition
HPC, APHERESIS	Hematopoietic Progenitor Cells obtained by an automated apheresis procedure	Peripheral blood collected by apheresis as a source of hematopoietic progenitor cells. Mobilized unless otherwise stated in Modifier
HPC, CORD BLOOD	Hematopoietic Progenitor Cells obtained from umbilical cord blood (occasionally blood from placental vessels) at the time of delivery from a volunteer donor	Umbilical cord blood and/or placental blood collected as a source of hematopoietic progenitor cells
HPC, MARROW	Hematopoietic Progenitor Cells obtained by multiple needle aspirations from the posterior iliac crests (occasionally from the anterior iliac crests or sternum) of an autologous or allogeneic donor	Bone marrow collected as a source of hematopoietic progenitor cells
T CELLS	T cells obtained by appropriate manipulation of a Whole Blood collection	(Not used)
T CELLS, APHERESIS	T cells obtained by appropriate manipulation of an apheresis collection	(Not used)
LYMPHOCYTES, APHERESIS	Lymphocytes obtained by appropriate manipulation of an apheresis collection	(Not used)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
POOLED HPC, APHERESIS	Pool of multiple HPC Apheresis collections from the same donor	(Not used)
CONCURRENT PLASMA, APHERESIS	(Not defined)	Plasma collected from the donor as part of an apheresis cell collection procedure for use by the laboratory in further processing of that donor's product
HPC, WHOLE BLOOD	Whole Blood collected with the intent for further processing for HPC contained within it	Whole blood collected as a source of hematopoietic progenitor cells. Mobilized unless otherwise stated in Modifier.
MNC, APHERESIS	Mononuclear cells obtained by apheresis	(Not used)
TC, APHERESIS	White Blood Cells collected by apheresis for therapeutic purposes	Source of nucleated cells obtained by an apheresis procedure intended for therapeutic use other than HPCs. Non-mobilized unless otherwise stated in the modifier.
TC-T, APHERESIS	(Not defined)	(Not used)
TC-CTL, APHERESIS	(Not defined)	(Not used)
TC-DC, APHERESIS	(Not defined)	(Not used)
TC, WHOLE BLOOD	(Not defined)	(Not used)
TC-T, WHOLE BLOOD	(Not defined)	(Not used)
TC-CTL, WHOLE BLOOD	(Not defined)	(Not used)
TC-DC, MARROW	(Not defined)	(Not used)
TC-DC, CORD	(Not defined)	(Not used)
TC, MARROW	(Not Used)	Bone marrow collected as a source of nucleated cells intended for therapeutic use other than HPCs

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
TC, WHOLE BLOOD	(Not Used)	Whole blood collected as a source of nucleated cells intended for therapeutic use other than HPCs
TC, CORD BLOOD	(Not Used)	Umbilical cord blood and/or placental blood collected as a source of nucleated cells intended for therapeutic use other than HPCs
TC-T CELLS	(Not Used)	A therapeutic cell product from any source containing a quantified T cell population
TC-CTL	(Not Used)	A therapeutic cell product containing cytotoxic lymphocytes for therapeutic use
TC-T REG CELLS	(Not Used)	A therapeutic cell product containing T regulatory lymphocytes for therapeutic use
TC-DC	(Not Used)	A therapeutic cell product containing dendritic cells for therapeutic use
TC-NK CELLS	(Not Used)	A therapeutic cell product containing natural killer cells for therapeutic use
TC-TUMOR DERIVED	(Not Used)	A product containing malignant cells or elements derived from them
TC-MSC	(Not Used)	A therapeutic cell product containing mesenchymal stromal cells for therapeutic use
TC-APC	(Not Used)	A therapeutic cell product containing antigen presenting cells other than dendritic cells for therapeutic use
TC-INV	(Not Used)	This class is reserved for use only in blinded studies of therapeutic cells accompanied by appropriate identifying study information.

## 2.2 Modifier

### 2.2.1 Bounded List and Definitions

Term	Old Definition	New Definition
Cryopreserved	Describes a product to which a cryopreservative solution has been added and maintained in the frozen state after preparation	Applies to cells in the frozen state after the addition of cryoprotectant(s)
Thawed	Describes a product that is currently in the liquid state and has been previously frozen	Applies to cryopreserved cells that have been thawed without washing prior to final issue for administration
Heparinized	Describes a product prepared by adding a variable amount of heparin to the anticoagulant before beginning the collection procedure, or in which heparin is the sole anticoagulant. Processing records should provide a record of the amount of heparin used; the label text should specify the amount of heparin in the final product.	(Not Used)
Frozen	Describes a product in the cryopreserved state at a designated temperature	(Not Used)
Washed	Describes a product that has been washed to remove any anticoagulant or cryopreservative solutions	Applies to cells from a non-cryopreserved product that have been washed to reduce the amount of plasma, anticoagulant, and/or other solution(s)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
Mobilized	(Not Used)	Applies to cells that have been obtained from a donor treated with an agent to increase the concentration of the target cell population(s) [to be used only for TC, Apheresis or bone marrow]
Non-Mobilized	(Not Used)	Applies to cells that have been obtained from a donor not treated with an agent to increase the concentration of the target cell population(s) [To be used only for HPC, Apheresis or HPC, Whole Blood]
Pooled, Single Donor	(Not Used)	Applies to the combination of multiple collections of the same product type from the same donor
Thawed Washed	(Not Used)	Applies to cryopreserved cells that have been thawed and subsequently washed to remove cryoprotectant or other solution(s)

## 2.3 Attribute

### 2.3.1 Core Conditions

Core Conditions is the term used to describe three pieces of information:

The anticoagulant/additive/cryoprotectant solution

“None” specifies that no significant amount of anticoagulant or additive is present.

“NS” indicates that the anticoagulant and/or additive are not specified.

Abbreviated names are used in accordance with standard naming conventions for anticoagulants/additives.

The nominal volume of the original collection excluding anticoagulant.

“XX” specifies that the volume is variable and not provided as part of the core conditions of the product description (HPC). Specific information may be given as additional label text

The temperature at which the product should be stored.

Specific temperatures are not always given in the description since differing specific temperature ranges must be adhered to within a given country. For example, refig (refrigerated) is used rather than a specific range, such as 1–4 C. When a specific temperature is given it is expressed in degrees Celsius.

### 2.3.1.1 Core Conditions

First Position – bounded list

Term	Old Definition	New Definition
ACD-A	Acid Citrate Dextrose, Formula A	(Not Used)
ACD-A+10% DMSO	Acid Citrate Dextrose, Formula A – 10% Dimethylsulfoxide	(Not Used)
ACD-A + Heparin	Acid Citrate Dextrose, Formula A – heparin	(Not Used)
ACD-A + Heparin+6% HES	Acid Citrate Dextrose, Formula A – heparin – 6% Hydroxyethyl Starch	(Not Used)
ACD-A + Heparin+6% HES + 10% DMSO	Acid Citrate Dextrose, Formula A– heparin – 6% Hydroxyethyl Starch – 10% Dimethylsulfoxide	(Not Used)
alb	Human Albumin	(Not Used)
CPD	Citrate Phosphate Dextrose	(Not Used)
CPD+Heparin	Citrate Phosphate Dextrose – heparin	(Not Used)
CPDA-1	Citrate Phosphate Dextrose Adenine	(Not Used)
CPDA-1+DMSO	Citrate Phosphate Dextrose Adenine – Dimethylsulfoxide	(Not Used)
CPDA-1+10% DMSO+30% SSPP+10% plasma	Citrate Phosphate Dextrose Adenine – 10% Dimethylsulfoxide + 30% Isotonic Albumin + 10% plasma	(Not Used)
CPDA-1+10% DMSO+0.8% HES+1% dextran	Citrate Phosphate Dextrose Adenine – 10% Dimethylsulfoxide – 8% Hydroxyethyl Starch + 1% Dextran	(Not Used)
DMSO	Dimethylsulfoxide	(Not Used)
Heparin	Heparin	Heparin used at any concentration as the sole method of anticoagulation
HES	Hydroxyethyl Starch	(Not Used)
HES-DMSO	Hydroxyethyl Starch – Dimethylsulfoxide	(Not Used)
NaCitrate	Sodium Citrate Solution	(Not Used)
PBS	Phosphate Buffered Saline	(Not Used)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
PBS+alb+4% NaCitrate	Phosphate Buffered Saline – albumin – 4% Sodium Citrate	(Not Used)
PBS+alb+4% NaCitrate+10% DMSO	Phosphate Buffered Saline – albumin – 4% Sodium Citrate – 10% Dimethylsulfoxide	(Not Used)
Plasma	Autologous Plasma	(Not Used)
SSPP	Isotonic Albumin	(Not Used)
None	No solutions added	No anticoagulant
NS	Not specified	Anticoagulant not specified in coding
Citrate	(Not Used)	Any anticoagulant containing citrate used as the sole method of anticoagulation
Citrate and Heparin	(Not Used)	Combined use of citrate and heparin at any concentration in the anticoagulant medium

Second Position – examples (this list is not bounded, other volumes may be defined)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
XX	Information about the original collection volume is not encoded but may appear in text on the label	Volume not specified in coding

Third Position – examples (this list is not bounded, other temperature ranges may be defined)

Term	Old Definition	New Definition
refg	Refrigerated (between 1 to 10 C; narrower range may be nationally-specified)	Refrigerated (between 1 – 10 C; narrower range may be nationally specified)
rt	Ambient room temperature	Ambient room temperature (range may be nationally specified)
≤-18C	(not used)	Less than or equal to -18 C
≤-80C	Less than or equal to -80 C	Less than or equal to -80 C
≤-120C	Less than or equal to -120 C	Less than or equal to -120 C
≤-150C	(not used)	Less than or equal to -150 C
N2 liquid	(not used)	Completely immersed in the liquid phase of nitrogen

## 2.3.2 Groups and Variables

Any additional manipulation or change to the product from its “core” state is reflected by the addition of one or more attributes from the groups and variables detailed below. Such additional manipulations or changes are indicated by a different Product Description Code.

### 2.3.2.1 Groups – bounded list and definitions

Group	Old Definition	New Definition
Intended Use	Describes the expected use of the product	Describes the expected use of the product
System Integrity	Describes the microbiological integrity of the collection/storage system	(Not Used)
Preparation — Additional Information	Provides supplementary information about the preparation of a product	(Not Used)
Final Product — Additional Information	Provides additional information regarding the number of containers of final product prepared from	(Not Used)

<b>Group</b>	<b>Old Definition</b>	<b>New Definition</b>
	a collection	
Manipulation	Describes selection processing applied to the collection	Describes processing applied to the collection
Further Processing	Describes additional processing steps	(Not used)
Cryoprotectant	(Not Used)	Active cryoprotectant in the product
Preparation – Blood component from third party donor	(Not Used)	Describes blood products from other donors used during processing, such as albumin, Fresh Frozen Plasma, AB serum, Red Blood Cells
Preparation – Other Additives	(Not Used)	Describes additives introduced other than as part of the anticoagulant solution at the time of collection
Genetically Modified	(Not Used)	Cells which have been modified by the insertion of exogenous genetic material.

## 2.3.3 Variables – bounded lists and definitions

For each group, the variable value shown in bold characters is the default value.

### 2.3.3.1 Intended Use Group

Term	Old Definition	New Definition
<b>Default: For administration</b>	<b>For Patient Use: The product is intended for the use in patient treatment</b>	<b>For patient use: The product is intended for administration to patients</b>
Not for tx (administration or further processing)	Not for Patient Use: a product that is not intended for use in patient treatment or further manufacturing.	Not for patient use; a product that is not intended for use in patient treatment or further processing
For further processing	(Not used)	Not intended for direct administration

### 2.3.3.2 System Integrity Group

Term	Old Definition	New Definition
<b>Default: Closed</b>	<b>The product has been prepared in a closed system and the microbiological integrity of the system has not been compromised.</b>	<b>(Not Used)</b>
Open	Open System: the system has been opened and the microbiological integrity may have been compromised.	(Not Used)

### 2.3.3.3 Preparation: Additional Information Group

Term	Old Definition	New Definition
<b>Default: no preparation information</b>	<b>There is no information about the preparation of the product.</b>	<b>(Not Used)</b>
6% HES+5% DMSO	Cryopreserved 6% HES and 5% DMSO: the cells were frozen using HES and DMSO as cryoprotective agents	(Not Used)
10% DMSO	Cryopreserved 10% DMSO: the cells were frozen using DMSO as a cryoprotective agent	(Not Used)
Heparin added	A product to which heparin has been added	(Not Used)
Plasma removed	A product from which most of the plasma has been removed	(Not Used)
Dextran+Albumin added	A product to which dextran and albumin have been added	(Not Used)
6% HES+5% DMSO-Plasma added	A product to which Hydroxyethyl Starch, Dimethylsulfoxide and plasma have been added	(Not Used)
Plasma added	A product to which plasma has been added	(Not Used)
Donor erythrocytes added	A product to which donor erythrocytes have been added	(Not Used)
Plasma reduced	A product from	(Not Used)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
	which some of the plasma has been removed	
1.25% Albumin in saline added	A product to which 1.25% albumin in saline has been added	(Not Used)

**2.3.3.4 Final Product: Additional Information Group**

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
<b>Default</b>	<b>A single container of final product was prepared from the collection.</b>	(Not Used)
1 <sup>st</sup> container	The first of two or more containers holding a product prepared from one collection	(Not Used)
2 <sup>nd</sup> container	The second of two or more containers holding a product prepared from one collection	(Not Used)
3 <sup>rd</sup> container	The third of three or more containers holding a product prepared from collection	(Not Used)
4 <sup>th</sup> container	The fourth of four or more containers holding a product prepared from one collection	(Not Used)
5 <sup>th</sup> container	The fifth of five or more containers holding a product prepared from one collection	(Not Used)
6 <sup>th</sup> container	The sixth of six or more containers holding a product prepared from one collection	(Not Used)
7 <sup>th</sup> container	The seventh of seven or more containers holding a product prepared from one collection	(Not Used)
8 <sup>th</sup> container	The eighth of eight or more containers holding a product prepared from one collection	(Not Used)
9 <sup>th</sup> container	The ninth of nine or more containers holding a product prepared from one collection	(Not Used)
10 <sup>th</sup> container	The tenth of ten or more containers holding a product prepared from one collection	(Not Used)
11 <sup>th</sup> container	The eleventh of eleven or more containers holding a product prepared from one collection	(Not Used)

Term	Old Definition	New Definition
12 <sup>th</sup> container	The twelfth of twelve or more containers holding a product prepared from one collection	(Not Used)
13 <sup>th</sup> container	The thirteenth of thirteen or more containers holding a product prepared from one collection	(Not Used)
14 <sup>th</sup> container	The fourteenth of fourteen or more containers holding a product prepared from one collection	(Not Used)
15 <sup>th</sup> container	The fifteenth of fifteen or more containers holding a product prepared from one collection	(Not Used)
16 <sup>th</sup> container	The sixteenth of sixteen or more containers holding a product prepared from one collection	(Not Used)

### 2.3.3.5 Manipulation Group

Term	Old Definition	New Definition
<b>Default: no manipulation</b>	<b>No further processing has occurred following collection.</b>	<b>No further processing has occurred following collection.</b>
Minimal	Minimally Manipulated: processed by centrifugation and/or density gradient fractionation to concentrate the mononuclear cell fraction [includes depletion of red blood cells and plasma]	(Not Used)
Extensive	Extensively Manipulated: further positive or negative selection of specific fractions from a minimally manipulated product	(Not Used)

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
CD8-depleted	The CD8 cell population has been reduced by appropriate manipulation.	(Not Used)
CD34-removed	The CD34 cell population has been reduced by appropriate manipulation.	(Not Used)
CD34-enriched	The CD34 cell population has been increased by appropriate manipulation.	Product in which the CD34 cell population has been enriched
AC133-selected	The ACC133 cell population has been selected for by appropriate manipulation	(Not Used)
PUV-treated	(Not defined)	Cells treated with psoralen/ultra violet light
From buffy coat	the product has been prepared from the buffy coat	(Not Used)
Buffy coat enriched	(Not defined)	Cells remaining after reduction of mature erythrocytes and plasma
T-cells depleted	T-cells have been removed from the product	(Not Used)
RBC-reduced	The number of red cells in the product has been reduced	Cells remaining after reduction of mature erythrocytes
Diluted	(Not Used)	A product to which an additional diluent (e.g. Concurrent Plasma) has been added after collection to reduce cell concentration for transit, storage, processing or cryopreservation

<b>Term</b>	<b>Old Definition</b>	<b>New Definition</b>
Plasma Reduced	(Not Used)	Cells remaining after a portion of the plasma has been depleted by sedimentation or centrifugation
Mononuclear cells enriched	(Not Used)	Cells remaining after reduction or depletion of mature erythrocytes, granulocytes and plasma
T-cell reduced	(Not Used)	Cells remaining after T cells have been reduced
B-cell reduced	(Not Used)	Cells remaining after B cells have been reduced
T/B-cell reduced	(Not Used)	Cells remaining after T&B cells have been reduced
CD8 reduced	(Not Used)	Cells remaining after the CD8 cell population has been reduced
CD34 enriched	(Not Used)	Product in which the CD34 cell population has been enriched
CD133 enriched	(Not Used)	A product in which the CD133 cell population has been enriched
Tumor cells reduced	(Not Used)	An identified tumor cell population has been reduced
Cultured	(Not Used)	Cells that have been maintained ex vivo to activate, expand, or promote development of a specified cell population in the presence of specified additive(s)

### 2.3.3.6 Further Processing Group

Term	Old Definition	New Definition
<b>Default: no further processing</b>	(Not defined)	(Not used)
Volume DMSO reduced	(Not defined)	(Not used)

### 2.3.3.7 Cryoprotectant Group

Term	Old Definition	New Definition
<b>Default: no cryo-protectant</b>	(Not used)	<b>No cryoprotectant has been added.</b>
6% HES + 5% DMSO	(Not used)	The cells were frozen using 6% HES and 5% DMSO by volume as cryoprotective agents
10% DMSO	(Not used)	The cells were frozen using 10% DMSO by volume as a cryoprotective agent
5% DMSO	(Not used)	The cells were frozen using 5% DMSO by volume as the cryoprotective agent
DMSO reduced	(Not used)	The cells were frozen using DMSO as a cryoprotective agent that has subsequently been partially removed using a wash procedure after thawing.

### 2.3.3.8 Preparation: Blood component from Third Party Donor Group

Term	Old Definition	New Definition
<b>Default: 3rd party comp:NO</b>	(Not used)	<b>Default: No third party blood component added</b>
3rd party comp:YES	(Not used)	Third party blood component added. See accompanying paperwork.

### 2.3.3.9 Preparation: Other Additives Group

Term	Old Definition	New Definition
<b>Default: Other additives:NO</b>	(Not used)	<b>Default: No additives other than as part of the anticoagulant solution at the time of collection</b>
Other additives:YES	(Not used)	Other additives. See accompanying paperwork

### 2.3.3.10 Genetically Modified Group

Term	Old Definition	New Definition
<b>Default: Genetically Modified:NO</b>	(Not used)	<b>Default: Not genetically modified.</b>
Genetically Modified:YES	(Not used)	Genetically modified by the insertion of exogenous genetic material. See accompanying paperwork

## 2.4 Product Code Description Table

Old Codes	S0001 through S1121	To be used only for backward compatibility as soon as the new system has been implemented
New Codes	S1122 and above	To be used for new products