Guidance on Labelling Requirements of Product Code, Unique Donation Identifier and Unique Recipient Identifier for Advanced Therapy Products

Version 1.0

(Draft for comment)

Drug Office

Department of Health

CONTENTS

1 Introduction

1.1 Advanced Therapy Products ("ATPs") are innovative medical products based on genes, cells and tissues. Due to their complicated nature, the safety and quality issues of the cells and tissues used for the manufacture of ATPs may only be identified after the processing, supply or administration to patients in some occasions. Additional health information about the donor may imply the safety and quality issues of the ATPs are sometimes known late after the donation, processing or supply of the cells and tissues products. As such, an effective and efficient traceability system covering from the donation through processing to the end use is essential to allow the determination of ATPs and patients potentially affected for the necessary patient follow-up and recall of the affected ATPs in these situations.

1.2 The traceability system is inseparable from the coding system for the cells and tissues. The coding system bearing the information of donation and cells and tissue types facilitates the tracing of the cells and tissues from donor to recipient and vice versa. Labelling of such codes on the packaging of ATPs and recording such information in the manufacturing and supply records permit rapid identification of affected cells, tissues and ATPs as well as the patients affected in case of any safety and quality issues identified.

1.3 For autologous ATPs, administration of the correct product to the intended recipient is crucial in terms of safety and efficacy. Labelling of the unique recipient identifier on the packaging of these products permits healthcare professionals to check the correct product to be administered to the correct intended recipient before the product administration and hence prevent any medical incidents owing to the product mix-up and administration of wrong product.

1.4 Under the Pharmacy and Poisons Ordinance, Cap. 138 ("PPO"), ATPs are regulated as a specific subset of pharmaceutical products. An ATP means any of the following products that is for human use—

(a) a gene therapy product;

(b) a somatic cell therapy product;

(c) a tissue engineered product.

1.5 Relevant definitions of pharmaceutical product, ATP, gene therapy product, somatic cell therapy product and tissue engineered product are set out in section 2 of the PPO.

1.6 According to regulation 31(1) of the Pharmacy and Poisons Regulations, Cap. 138A ("PPR"), a licensed manufacturer shall label the container of the ATP with the following particulars-

(a) the appropriate designation of each active ingredients/constituents of the product;

(b) the quantitative particulars of those ingredients or constituents;

(c) the name and address of the manufacturer;

(d) the number of the certificate issued under regulation 36(5) if the ATP is registered under regulation 36 (i.e. the registration number of registered pharmaceutical product);

(e) the batch number;

(f) the expiry date;

(g) (i) the product code and the unique donation identifier; and

(ii) the unique recipient identifier and "For autologous use only" or "只供自體使用" if the product is for autologous use only.

1.7 According to regulation 38(1) of the PPR, no person shall sell or supply a medicine unless it is labelled as required under the regulation 31 of the PPR.

2 Purpose and Scope

2.1 This guidance aims to provide information to licensed manufacturers and licensed wholesale dealers on the requirements of assigning the Product Code, Unique Donation Identifier and Unique Recipient Identifier for labelling of ATPs stated under regulation 31(1)(g)(i) and (ii) of the PPR. It also introduces two internationally recognized labelling systems – the ISBT 128 standard and the Single European Code, that could be adopted for assigning the Product Code and Unique Donation Identifier for ATPs containing human cells or tissues.

2.2 For labelling requirements stated under regulation 31(1)(a) to (f) of the PPR and other additional labelling requirements, please refer to "*Guidelines on labelling of pharmaceutical products*" published by the Drug Office of the Department of Health[1].

2.3 This guidance is applicable to ATPs manufactured locally or imported for local sale or distribution.

[1] The document is available at https://www.drugoffice.gov.hk/eps/do/en/pharmaceutical_trade/guidelines_forms/pr_guide_main.html.

3 Internationally Recognized Systems

3.1 ISBT 128 standard and Single European Code are two widely accepted coding systems for human cells and tissues. Both systems include two components – coding for identification of cell and tissue type and coding for the identification of the donation – which could be used to facilitate traceability of the cells and tissues from donation to products, and vice versa.

3.2 Either one of the above systems could be used in labelling ATPs containing human cells or tissues to meet the requirements of Product Code and Unique Donation Identifier required under regulation 31(1)(g)(i) of the PPR.

3.3 If the ATPs containing human cells or tissues are not labelled in accordance with one of the above systems, Product Code and Unique Donation Identifier could be assigned in accordance with section 4 and section 5 of this guidance respectively.

3.4 Since both internationally recognized systems are applicable to human cells and tissues only, for ATPs that do not contain any human cells or tissues, the product should be labelled with the following particulars in order to meet the Product Code and Unique Donation Identifier requirement under regulation 31(1)(g)(i) of the PPR –

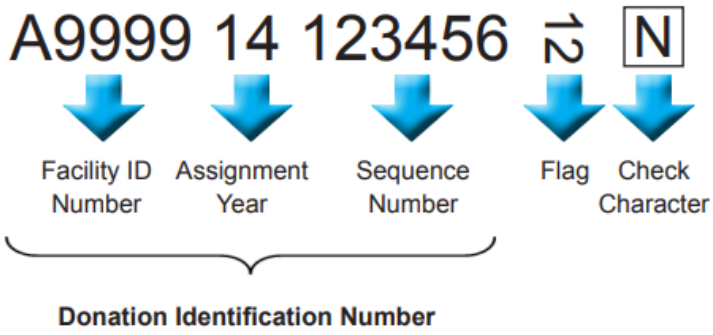
- product name;
- international non-proprietary name (INN), if any; and
- for ATPs containing animal cells or tissues, information reflecting the animal species, country of origins and types of cells and/or tissues contained

ISBT 128 Standard

3.5 ISBT 128 (Information Standard for Blood and Transplant) standard is an international standard for the terminology, identification, coding and labelling of products of human origin (including blood, cell, tissue, milk, and organ products), which is registered and licensed for use by the International Council for Commonality in Blood Banking Automation ("ICCBBA"). The ISBT 128 standard includes a donation identification number ("DIN") and a product code on the label.

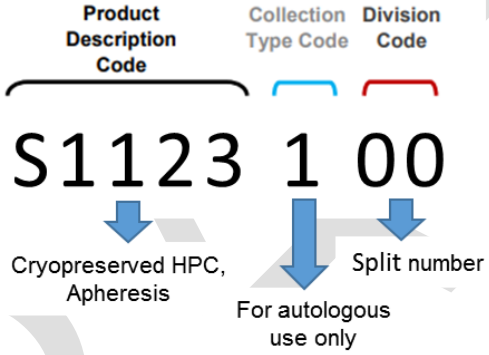
3.6 DIN of the ISBT 128 standard provides a unique identification for every single donation or pooled product made by ISBT 128 licensees worldwide. DIN is a 13-character identifier built up from three elements—the facility identification number, the year in which the DIN is assigned by the facility and a sequence number assigned and maintained by the facility for each single donation.

Example of DIN is as follows:



3.7 Product code of the ISBT 128 standard provides a comprehensive description of the product. The product code consists of an 8-character sequence built up from three elements, the product description code, collection type code and division code.

Example of a product code is as follows:



3.8 Details and guidance documents of the ISBT 128 standard can be found in the ICCBBA website https://www.iccbba.org/.

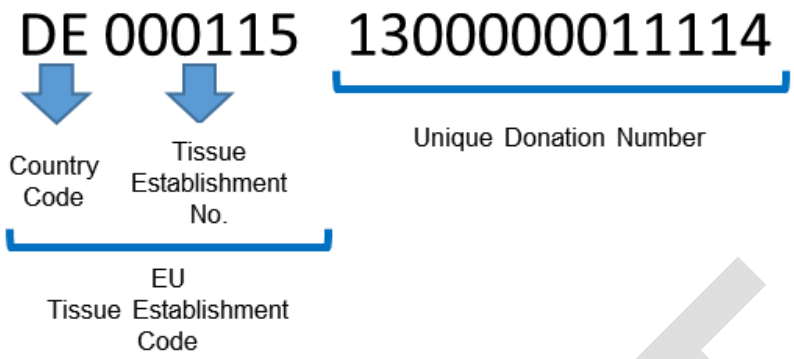
Single European Code ("SEC")

3.9 SEC is the unique identifier applied to cells and tissues distributed in the European Union ("EU"). SEC is a coding system used in EU for human cells and tissues intended for human application, to ensure the traceability of cells and tissues from the donor to the recipient and vice versa. The SEC consists of a donation identification sequence ("SEC-DI") and a product identification sequence ("SEC-PI").

3.10 SEC-DI is the first part of the SEC and it provides a unique identification of every single donation or pooled product in accredited, designated, authorised, or licensed tissue establishments in EU. SEC-DI is a 21-character identifier built up from two elements—an EU tissue establishment code (consisting of an ISO country code and a tissue establishment number) and a unique donation number attributed to

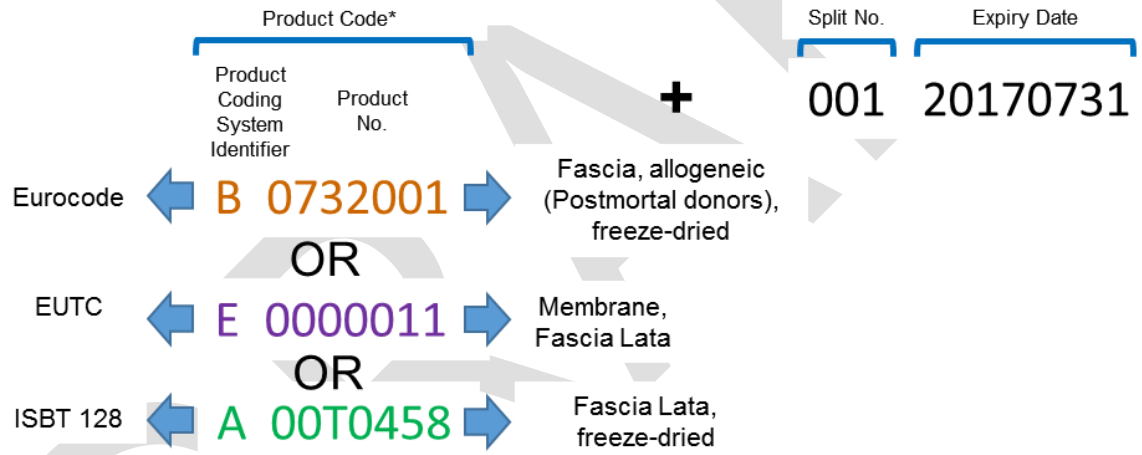
each single donation.

Example of a SEC-DI is as follows:



3.11 SEC-PI is the second part of the SEC and it provides identification for the specific type of cell and tissue. SEC-PI is a 19-character sequence built up from three elements—the product code, the split number and the expiry date of the product.

Example of a SEC-PI is as follows:



3.12 Details of SEC can be found in the following webpage:

https://ec.europa.eu/health/blood_tissues_organs/tissues/single_european_code_en.

4 Requirements of Product Code

4.1 Product Code is a set of coding sequence for identification of cell and tissue types contained in an ATP. If neither ISBT 128 standard nor SEC is adopted for labelling the ATPs containing human cells and tissues, a set of coding sequence should be assigned according to this section and labelled on the product as Product Code.

4.2 This section is applicable to ATPs containing human cells or tissues only; for ATPs that do not contain human cells or tissues, the product should be labelled according to section 3.4 in order to meet the Product Code requirement under regulation 31(1)(g)(i) of the PPR.

4.3 The Product Code consists of two parts—the **Product Coding System Identifier** and the **Product Number**. The structure and the format of the Product Code are as follows:

Product Code	
Product Coding System Identifier	**Product Number**
1 character (alphabetic)	7 characters (alphanumeric)

4.4 Currently there are three product coding systems available globally which are widely used for describing human cells and tissues. They are the ISBT 128 standard product code by the ICCBBA, the Eurocode and the EU Tissue and Cell Product Compendium ("EUTC"). The register of all available types of cells and tissues, and their respective product number under these three product coding systems can be found in the website named EU Coding Platform (https://webgate.ec.europa.eu/eucoding). One of the three coding systems should be adopted for assigning the Product Code of the ATPs supplied in Hong Kong.

4.5 **Product Coding System Identifier** is a 1-alphabetic character indicating the coding system adopted for labelling the ATPs supplied in Hong Kong of which "A" is assigned to the ISBT 128 standard product code, "B" is assigned to the Eurocode and "E" is assigned to the EUTC.

4.6 **Product Number** is 7-alphanumeric characters revealing the type of cells or tissues contained in an ATP. The most appropriate product number must be chosen from the adopted coding system to describe the types of cells and/or tissues contained in an ATP. If the product number has less than 7 characters, it should be padded with leading zeros.

4.7 For example, an ATP containing cryopreserved hematopoietic progenitor cell isolated from bone marrow, the product codes of the same ATP using different coding systems are as follows[2]:

(a) Product code labelled with the ISBT 128 standard product code

Product Code: A00S1122	
Product Coding System Identifier (For ISBT 128 standard)	**Product Number (ISBT 128 standard product description code padded to seven characters with two leading zeros)**
A	00S1122

Product coding system identifier "A" corresponds to the ISBT 128 standard product code and "S1122" corresponds to cryopreserved hematopoietic progenitor cell isolated from bone marrow under the ISBT 128 standard product code. Since the product number "S1122" has less than 7 characters it should be padded with leading zeros and becomes "00S1122".

(b) Product code labelled with the Eurocode

Product Code: B0460234	
Product Coding System Identifier (For Eurocode)	**Product Number (Eurocode padded to seven characters with a leading zero)**
B	0460234

Product coding system identifier "B" corresponds to the Eurocode and "460234" corresponds to cryopreserved hematopoietic progenitor cell isolated from bone marrow under the Eurocode. Since the product number "460234" has less than 7 characters, it should be padded with a leading zero and becomes "0460234".

[2] Product number is obtained from database of the EU Coding Platform website for each coding system, https://webgate.ec.europa.eu/eucoding.

(c) Product code labelled with the EUTC

Product Code: E0000078	
Product Coding System Identifier (For EUTC)	**Product Number (EUTC Code padded to seven characters with five leading zeros)**
E	0000078

Product coding system identifier "E" corresponds to the EUTC and "78" corresponds to hematopoietic progenitor cell isolated from bone marrow under the EUTC. Since the product number "78" has less than 7 characters it should be padded with leading zeros and becomes "0000078".

4.8 Subject to the consideration and approval by the respective committees of the Pharmacy and Poisons Board, the requirement of product code may be deemed to have fulfilled if an ATP, that is not labelled with the product code assigned according to section 3 or 4 of this guidance, is labelled with sufficient information that specifically identifies the types of cells or tissues contained.

5 Requirements of Unique Donation Identifier

5.1 Unique Donation Identifier ("UDI") is a unique sequence attributed to the specific donation of the cells or tissues for unique identification. If neither ISBT 128 standard nor SEC is adopted for labelling the ATPs containing human cells and tissues, a set of coding sequence should be assigned according to this section and labelled on the product as UDI.

5.2 This section is applicable to ATPs containing human cells or tissues only; for ATPs that do not contain human cells or tissues, the product should be labelled according to section 3.4 in order to meet the Unique Donation Identifier requirement under regulation 31(1)(g)(i) of the PPR.

5.3 For human cells or tissues obtained from a tissue establishment of the EU and already assigned with a SEC (or SEC-DI), the SEC-DI part of that SEC could be adopted as the UDI of the ATPs manufactured from them. For details of SEC-DI, please refer to section 3.10 of this guidance.

5.4 For human cells or tissues without any assigned SEC (or SEC-DI), for example, obtained from a non-European country or collected locally, the ISBT 128 standard should be adopted. The DIN part of the ISBT 128 standard of those cells and tissues should be labelled on the ATPs manufactured from them as an UDI. For details of DIN, please refer to section 3.6. If the human cells or tissues obtained has already been assigned with a DIN of the ISBT 128 standard, this DIN could be used and labelled on the ATPs manufactured from them as an UDI. For human cells or tissues without any assigned DIN of the ISBT 128 standard, licensed manufacturers should assign a DIN or SEC-DI to the cells and tissues obtained according to ISBT 128 standard or SEC-DI (if applicable) respectively. Registration is required for a facility to assign ISBT 128 standard code and the details can be found in the ICCBA website https://www.iccbba.org/.

5.5 If licensed manufacturers pool the human cells or tissues labelled with different DIN of the ISBT 128 standard or SEC-DI, the licensed manufacturers should assign a UDI using the ISBT 128 standard to the ATPs manufactured from those pooled cells or tissues. The licensed manufacturers must ensure that individual donation information remains traceable after the new UDI has been assigned.

5.6 Licensed manufacturers should ensure that the facility from where the human cells or tissues are obtained implements a system enabling the tracing of the following donation information in case a particular UDI is provided —

(1) Name and address of the donation site

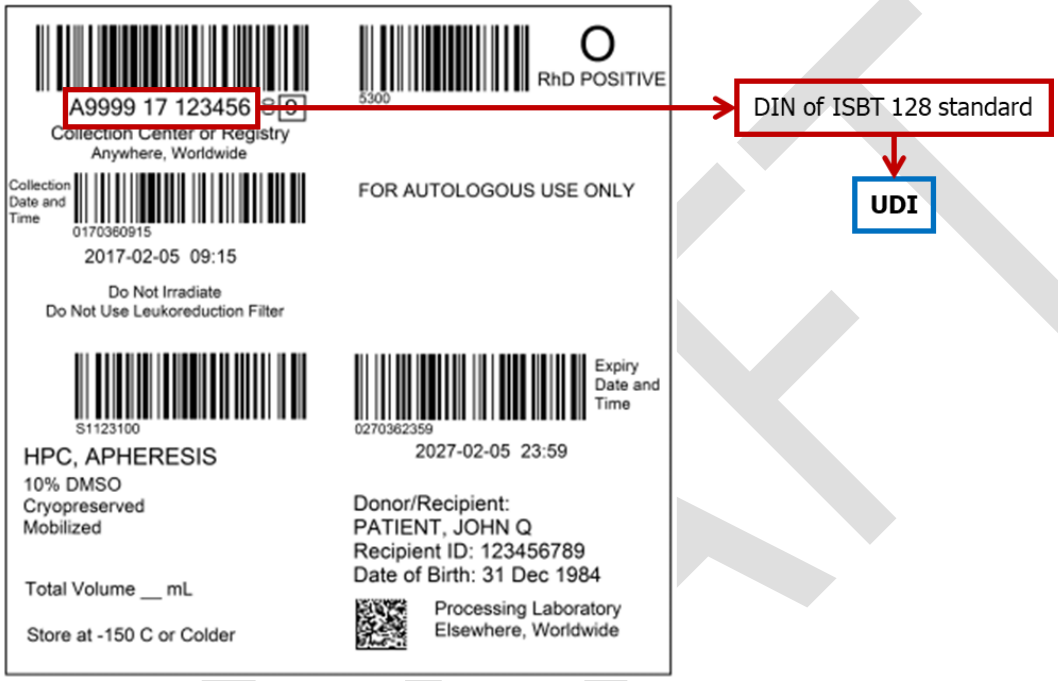
(2) Identifier of the donor;

(3) Date of donation;

(4) Types of cells and/or tissues donated

5.7 Examples of UDI are as follows:

(a) Cells or tissues labelled with the ISBT 128 standard



(b) Cells or tissues labelled with the SEC

6 Requirements of Unique Recipient Identifier for Autologous Advanced Therapy Products

6.1 According to regulation 31(1)(g)(ii) of the PPR, an ATP for autologous use should be labelled with a Unique Recipient Identifier ("URI").

6.2 The URI is a combination of recipient information sufficient for healthcare professionals to verify the identity of the intended recipient of the product. The URI should consist of at least two sets of information including recipient's surname followed by initials of first name plus either –

- Month and year of birth; or
- Any other numeric or alphanumeric number/sequence that is referring to the recipient (e.g. Part of recipient's hospital number/medical record number);

6.3 For example, the URI on the label of an autologous ATPs for a recipient named "Chan Tai Man" with the date of birth "02/01/1960" can be as follows:

Name of Recipient: ChanTM
Month and Year of Birth: 01/1960

6.4 Licensed manufacturers and licensed wholesale dealers should ensure that healthcare professionals who use the ATPs fully understand how to interpret and use the recipient information contained in the URI to verify the identity of the recipient.

6.5 In addition, licensed manufacturers and licensed wholesale dealers should comply with the requirements in the Personal Data (Privacy) Ordinance, Cap. 486 ("PDPO") when handling personal data. In case of any doubt, the PDPO should be consulted.

Document Information

Version	Date	Description of Change
1.0	30/11/2020	First version (Draft for comment)