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# **Serialization Requirements & Guidance Document for Contract Manufacturers & Packagers**

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## 1. OVERVIEW

XGen Pharmaceuticals DJB, Inc. (XGen DJB) has launched a global serialization program with the objective of maintaining compliance with the United States *Drug Supply Chain Security Act* (DSCSA) regulatory requirements. The first phase of this program was implemented in 2015 with XGen DJB providing lot level Transaction Information and Transaction History to our customers for shipments of prescription pharmaceutical products.

The next phase of DSCSA requires prescription drug products in the U.S. to be labeled with a unique identifier (serial number) by GTIN at the saleable unit level by November 27, 2017. The FDA subsequently issued a guidance document announcing that they would delay enforcement until November 27, 2018. XGen DJB has created a standard set of minimum requirements for Contract Manufacturing Organizations (CMOs) and Contract Packaging Organizations (CPOs) with which to comply when providing these services to XGen DJB.

XGen DJB may consider alternatives for CMO/CPOs that are unable to meet these specific requirements. However, compliance with the standard requirements will support a smoother transition for all parties.

### UPDATES

#### FROM VERSION 10.x to VERSION 11

- Updated company name from X-GEN Pharmaceuticals, Inc. (X-GEN) to XGen Pharmaceuticals DJB, Inc. (XGen DJB)
- Section 3.5 – Removed reference to FDA delay in enforcement, as that expired in November, 2018
- All references to EPCIS version changed from 1.0 to 1.2

### 1.1 SCOPE

This document will provide CMOs/CPOs with XGen DJB's business requirements and guidance for the transition to the serialized labeling of finished goods pharmaceutical products. This document will outline data encoding requirements, trading partner data exchange, and master file data requirements for all XGen DJB prescription pharmaceutical products.

In summary, the scope of these requirements will include:

- Serialized labeling and aggregation of saleable units and cases for pharmaceutical products produced/packaged for XGen DJB.
- Assignment and provision of sellable unit GTIN, case GTIN and bundle GTIN specific serial numbers and SSCC numbers from XGen DJB to CMO/CPO in XML files exchanged via an AS2 connection.
- Provision of aggregated serialized data from CMO/CPO to XGen DJB for each finished good prescription drug product shipment.
- Data exchange of serialized shipment data between the CMO/CPO and XGen DJB utilizing *EPCIS v1.2* standard events and exchanged via **AS2 connection**.
- Master data exchange

This document may be subject to change as any FDA final guidance documents pertaining to DSCSA are published and interpreted by the industry. Changes will be discussed with CMOs/CPOs as appropriate.

## 2. TERMS, ACRONYMS & DEFINITIONS

Term or Acronym	Definition
Application Identifier (AI)	A field (typically two digits) at the beginning of a data string that uniquely defines the meaning and the format of the data that follows. To facilitate human readability, the AI is recognized by having parentheses around it in the human readable, but the parentheses are not part of the data and are not encoded in the barcode.
CMO	Contract Manufacturing Organization
CPO	A “Contract Packaging Organization”, also known as “Third Party Packager” (3PP).
GS1 2D DataMatrix	GS1 DataMatrix is a two-dimensional (2D) barcode that holds large amounts of data in a relatively small space. The GS1 organization has defined standards for this barcode.
DSCSA	<i>Drug Supply Chain Security Act</i>
EPCIS	“A GS1 standard that enables trading partners to share information about the physical movement and status of products as they travel throughout the supply chain – from business to business and ultimately to consumers. It helps answer the ‘what, where, when and why’ questions to meet consumer and regulatory demands for accurate and detailed product information.” XGen DJB is currently using version 1.0
FDA	The Food and Drug Administration for the United States
FNC1	“Function 1” Symbol Character is a character (ASCII 232) used to indicate GS1 symbology. The FNC1 is placed in the first position of the data encoded so that scanner processes the proceeding information according to GS1 system rules. In addition, FNC1 is used as a field separator to identify breaks between AI data that is not of pre-defined length.
Grandfathering	Refers to the rules applied to prescription drug products produced and/or packaged prior to the November 27, 2018 delayed enforcement deadline that are not serialized. The FDA issued a draft guidance on , indicates that any product “introduced into the supply chain” must be serialized by November 27, 2018. The accepted definition of “introduced into the supply chain” means shipped from the manufacturer to their customers.
GTIN	Global Trade Identification Number, which is the GS1 identification key used to uniquely identify trade items. The key is comprised of the company’s GS1 prefix, an item reference and check digit. GTINs are created for sellable unit, full homogeneous case, and if used, for bundles.
GS1	GS1 is a neutral, not-for-profit, international organization that develops and maintains standards for supply and demand chains across multiple industry sectors.
HDA– formerly HDMA	Formerly known as HDMA, the Health Distribution Alliance (HDA) is the U.S. national association with the mission to protect patient safety and access to medicines through safe and efficient distribution; advocate for standards, public policies and business

	processes that enhance the safety, efficiency and value of the healthcare supply chain; and, create and exchange industry knowledge and best practices.
Homogeneous Case	A shipper case with multiple units of the same NDC/sellable unit GTIN product. A homogeneous case will be assigned a case GTIN.
Human Readable	Characters such as letters and numbers encoded in data carriers/bar codes that can be read by the human eye. These are typically printed under the bar code and is a one-to-one depiction of the encoded data.
Saleable or Sellable Unit	For a manufacturer's product, the lowest unit of sale such as a carton, vial, blister pack, etc.
SSCC(18)	An 18-digit " <i>Serial Shipping Container Code</i> " that is used to identify logistics unit. The SSCC is encoded in a GS1-128 bar code. It is used for partial cases and pallets.
Shipper Label	This is a label that is applied to non-homogeneous cases, or totes and Pallets. This label often contains logistics information and the SSCC (18).

### 3. GENERAL SERIALIZATION REQUIREMENTS

The following general requirements should be utilized as adherence guidelines by all CMO's/CPO's that produce and/or package finished good pharmaceutical products for XGen DJB. These will also be utilized to facilitate initial Serialization program related discussions between XGen DJB and our CMOs/CPOs. Note that these requirements are specific and restricted solely to the compliance with the DSCSA for the United States of America.

- 1) **Serial Number Format & Management** – XGen DJB will use a **13-digit numeric** serial number format. *We may need alpha-numeric in the future but have no current plans to add alpha characters.* Any exception to this format, if required by an XGen DJB business partner would require discussion. XGen DJB will internally commission and provide to the CMO/CPO a discrete set of serial numbers for *each specific GTIN* at the saleable unit level and for specific case level and bundle level GTINs. See details in section 5.1.
- 2) **Products to be Serialized** – All human prescription drugs in the U.S. must be serialized.
- 3) **Aggregation** – Although not initially required by law for the November 2017 date, XGen DJB does require aggregation to support internal processes as well as our customers' requirements. As such, XGen DJB will initially require aggregation and provision of the related aggregated data to the Shipper/Case level for all product shipments to XGen DJB. If bundles are used, aggregation is required to that level, as well. XGen DJB does not *require* aggregation to the pallet level, but we will accept it if sent by CMO/CPO as part of their standard communications.
- 4) **Product and Location Master Data** – XGen DJB may subscribe to the HDA's Origin product database and will expect many CMOs/CPOs to do the same for master data. However, XGen DJB may provide product and location master data as needed. Formats can be discussed, e.g., Excel file, Word document, etc.
- 5) **Implementation Timing** – Per the DSCSA, XGen DJB requires all CMOs to be capable of serializing product and exchanging the required data now. XGen DJB, along with the CMO/CPO will determine specific pilot and implementation dates based on production schedules for XGen DJB products and CMO/CPO capabilities.
- 6) **Electronic Data Exchange Communications** – The transmission of Serial Number and SSCC Request and Serial Number and SSCC Response transmissions, as well as serialized EPCIS events between parties will be **via AS2 connection**. XGen DJB does not currently have Web Services capability. Future date for Web Services is to be determined.
- 7) **EPCIS** – XGen DJB will require the usage of the **EPCIS v1.0** standards for the management of serial numbers and the transmission/receipt of serialized product related events with CMOs/CPOs. CMOs/CPOs may choose to select and engage an EPCIS solution provider or support in-house.
- 8) **Packaging and Labeling Reviews** – XGen DJB will work with the CMO/CPO to ensure packaging and labeling meets all DSCSA requirements. XGen DJB follows the HDA's Barcode Guidelines and expects CMOs/CPOs to do the same. The GMP documentation testing and acceptance criteria will be jointly reviewed with each CMO/CPO.

## 4. PHYSICAL PRODUCT MARKING AND CODING

XGen DJB requires that all saleable unit prescription drug products be physically marked per the DSCSA requirements. XGen DJB will follow applicable GS1 and HDA standards for barcode design and encoded application identifiers. Serialization product marking and coding requirements will be required at the “sellable unit” level and to the homogeneous case level and bundle level (if bundles are used.)

Serialization marking and coding requirements include encoding data elements such as the global trade identification number (GTIN), lot number, expiration date, and serial number. Coding and serialization requirements will also indicate the type of data carrier to be used such as GS1 data matrix or GS1-128 linear barcode. Refer to the HDA GUIDELINES FOR BAR CODING IN THE PHARMACEUTICAL SUPPLY CHAIN publication for additional technical guidance.

XGen DJB will work with the CMO/CPO and conduct a joint review of the supplied NDC’s to verify scope, review marking/coding content requirements, and confirm due dates for the transition to serialized product.

HDMA Shipping Case Product Identification Label – Summary Specifications Bar Code Symbology, Encoded Data Element, Human-Readable Interpretation (HRI) & Print Quality		
Important Parameters	Format #1 – GTIN+SERIAL NUMBER	Format #2 – GTIN
<b>Symbology</b> (see Note 1)	Primary: GS1-128 (incl. FNC1 where req'd) Secondary: GS1-128 (incl. FNC1 where req'd) 2D Prim.+Sec.: GS1 DataMatrix (incl. FNC1 where req'd)	GS1-128 (incl. FNC1 where req'd) GS1-128 (incl. FNC1 where req'd) GS1 DataMatrix (incl. FNC1 where req'd)
<b>Encoded Data Elements</b> (see Note 2)	Primary: GTIN-14 + SN: AI(01)+AI(21) Secondary: EXP + LOT + QTY: AI(17)+AI(10)+AI(30) 2D Prim.+Sec. COMBINED: GTIN-14 + SN + EXP + LOT AI(01)+AI(21)+AI(17)+AI(10)	GTIN-14: AI(01) EXP + LOT + QTY: AI(17)+AI(10)+AI(30) GTIN-14 + EXP + LOT AI(01)+AI(17)+AI(10)
<b>GS1-128 Bar Code Symbol X-dimension</b> Primary & Secondary	Preferred: 16.7-20.0 mils (0.0167-0.0200 in.) Minimum: 13.3 mils (0.0133 in.)* *Use largest X-dim that will fit on the label	16.7-20.0 mils (0.0167-0.0200 in.) 13.3 mils (0.0133 in.)* *Use largest X-dim that will fit on the label
<b>GS1-128 Bar Code Symbol Height</b> Primary & Secondary (Increased height can improve scannability)	PRIMARY Preferred: 0.75 inches Minimum: 0.5 inches SECONDARY Preferred: 0.5 inches Minimum: 0.4 inches	GTIN-14: AI(01) 0.75 inches 0.5 inches EXP + LOT + QTY: AI(17)+AI(10)+AI(30) 0.5 inches 0.4 inches
<b>GS1 DataMatrix (2D) Bar Code X-dimension</b>	Preferred: 30.0 mils (0.0300 in.) Minimum: 30.0 mils (0.0300 in.)	30.0 mils (0.0300 in.) 30.0 mils (0.0300 in.)
<b>Bar Code Quiet Zones - MINIMUM Width</b>	GS1-128 10X (10 times X-dim; 0.20" recommended) GS1 DataMatrix 3X (3 times X-dim; 0.10" recommended)	10X (10 times X-dim; 0.20" recommended) 3X (3 times X-dim; 0.10" recommended)
<b>Bar Code Quality - MINIMUM Grade</b>	GS1-128 1.5/10/660 (per GS1 & ISO/IEC 15416) GS1 DataMatrix 1.5/20/660 (per HDMA & ISO/IEC 15415)	1.5/10/660 (per GS1 & ISO/IEC 15416) 1.5/20/660 (per HDMA & ISO/IEC 15415)
<b>Position of Bar Code Symbols on Label</b>	2D Prim.+Sec.: GS1 DataMatrix, Upper Right Corner Secondary: GS1-128, Directly Above Primary Symbol Primary: GS1-128, Bottom of Label	GS1 DataMatrix, Upper Right Corner GS1-128, Directly Above Primary Symbol GS1-128, Bottom of Label
<b>Bar Code Human-Readable Interpretation (HRI) Position &amp; Size</b>	2D Prim.+Sec.: None (Data is IDENTICAL to Prim. & Sec.) Secondary: Below GS1-128, 10 Point (8 pt. min.) Primary: Below GS1-128, 10 Point (8 pt. min.)	None (Data is IDENTICAL to Prim. & Sec.) Below GS1-128, 10 Point (8 pt. min.) Below GS1-128, 10 Point (8 pt. min.)
<b>Secondary Data DESC.</b>	Secondary: Above GS1-128, 12 Point (10 pt. min.)	Above GS1-128, 12 Point (10 pt. min.)
<b>Printing Process and Substrate</b>	All Labels Thermal Transfer Pressure-sensitive Label	Thermal Transfer Pressure-sensitive Label
<b>Label Skew</b>	All Labels +/- 2 Degrees from Horizontal** **Approx. 0.15 inch Across a 4" Wide Label	+/- 2 Degrees from Horizontal** **Approx. 0.15 inch Across a 4" Wide Label
<p><b>Note 1:</b> Primary and secondary data in separate GS1-128 symbols is required. In addition, it is strongly recommended that primary and secondary data be combined as specified and encoded in a complimentary 2D GS1 DataMatrix symbol.</p> <p><b>Note 2:</b> GS1-128 &amp; GS1 DataMatrix symbols encode FNC1 at the beginning of the symbol and as a variable-length field delimiter, as required.</p> <p>GTIN: FNC1+AI(01)+GTIN            GTIN+SN: FNC1+AI(01)+GTIN+AI(21)+SN            EXP+LOT+QTY: FNC1+AI(17)+EXP+AI(10)+LOT+FNC1+AI(30)+QTY            GTIN+SN+EXP+LOT: FNC1+AI(01)+GTIN+AI(21)+SN+FNC1+AI(17)+EXP+AI(10)+LOT</p>		

## 4.1 GENERAL REQUIREMENTS FOR LABELING & DATA ENCODING

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### 4.1.1 SALEABLE UNIT-LEVEL

- GS1 ECC200 DataMatrix Code will be used as the data carrier for encoding the required information.
- The format for the DataMatrix Code will be square.
- The minimum DataMatrix cell/module size (X dimension) will be approximately 0.4 mm per module.
- A quiet zone of at least 10mil around the entire perimeter of the code will be required for successful reading / scanning and must be accounted for in label/carton design and printing/vision systems configuration. HDA's *Guidelines for Bar Coding in the Pharmaceutical Supply Chain* recommends minimum of .1 inch around the DataMatrix code.
- DataMatrix ECC200 encoding adheres to ISO/IEC 0646. Only characters specified in ISO/IEC 646 will be used and no spaces or character accents are permitted.
- Quality of DataMatrix ECC200 code will target a grade B or better in accordance with ISO 15415 specification. Grade C will also be accepted as the minimum.
- The DataMatrix ECC200 Code will have a leading FNC1 character (ASCII 232) in the first position to indicate that it is a GS1 DataMatrix ECC200. Additionally, an FNC1 Group Separator (ASCII 232) will be used after any variable-length field when additional data elements follow.
- Application Identifiers (AIs) will be used to meaningfully identify all encoded data in a consistent, harmonized manner.
- Data encoded will be verified as able to be decoded and equivalent to readable text.
- Data printed in human readable text will comply with regulatory requirements, where applicable.
- Data printed in human readable text requires a minimum font size of 8 pt.

### 4.1.2 HOMOGENEOUS CASE-LEVEL

- General notes relevant to the sales unit-level bar code apply to the case level as well.
- GS1-128 will be the symbology to be used for linear bar code printing.
- GS1 DataMatrix ECC200 will be the symbology to be used for printing of 2-D codes.
- Partial cases will be labeled with an SSCC.
- The minimum DataMatrix cell/module size (X dimension) will be approximately 0.5 mm per module.
- Data printed in human readable text requires a minimum font size of 8 pt.



## 4.2 DATA ELEMENTS FOR DATA MATRIX ENCODING

### 4.2.1 SALEABLE UNIT LEVEL

As per the HDA's *Guidelines for Bar Coding in the Pharmaceutical Supply Chain*, each saleable unit must be serialized with the following data embedded within the GS1 2D DataMatrix:

**< FNC1>+AI(01)+GTIN+AI(21)+Serial Number+<FNC1>+AI(17)+Expiration Date+AI(10)+Lot Number**

The first FNC1 is used to indicate that this is a GS1 128 bar code. The second FNC1 (also known as a Group Separator) is used to terminate the variable length serial number prior to starting the next AI. Since the lot number is last data element encoded in the bar code, there is no need to terminate using FNC1. The parentheses are not encoded in the bar code — they are only shown as human-readable.

### 4.2.2 HOMOGENEOUS FULL CASE

As per the HDA's *Guidelines for Bar Coding in the Pharmaceutical Supply Chain*, the HDA-recommended case label format MUST include two distinct GS1-128 linear bar codes on the label (one placed directly above the other) and one GS1 DataMatrix bar code. The primary case GS1-128 bar code (bottom bar code) encodes the case GTIN and the case serial number. The secondary case bar code (top bar code) encodes the expiration date, lot number and quantity. The GS1 DataMatrix bar code combines all data elements from both primary and secondary GS1-128 bar codes.

The encoded case primary GS1-128 bar code should appear as:

**< FNC1>+AI(01)+caseGTIN+AI(21)+Serial Number**

The FNC1 is used to indicate that this is a GS1 128 barcode.

The encoded case secondary GS1-128 bar code should appear as:

**<FNC1>+AI(17)+Expiration Date+AI(10)+Lot Number+<FNC1>+AI(30)+Case Quantity**

The first FNC1 is used to indicate that this is a GS1 128 barcode. The second FNC1 (also known as a Group Separator) is used to terminate the variable length Lot Number prior to starting the next AI. Since the case quantity is last data element encoded in the bar code, there is no need to terminate using FNC1. The parentheses are not encoded in the bar code— they are only shown as human-readable.

The encoded GS1 2D DataMatrix data should appear as:

**< FNC1>+AI(01)+caseGTIN+AI(21)+Serial Number+<FNC1>+AI(17)+Expiration Date+AI(10)+Lot Number**

The first FNC1 is used to indicate that this is a GS1 DataMatrix. The second FNC1 (also known as a Group Separator) is used to terminate the variable length serial number prior to starting the next AI. The third FNC1 (also known as a Group Separator) is used to terminate the variable length lot number prior to starting the next AI. Since the case quantity is last data element encoded in the bar code, there is no need to terminate using FNC1. The parentheses are not encoded in the bar code — they are only shown as human-readable.

## 4.3 LABEL SAMPLES

### 4.3.1 SALES UNIT-LEVEL GS1 DATAMATRIX ECC200

Below is a sample illustration of a GS1 standard DataMatrix ECC200 meeting HDA barcode guidelines. It is provided for reference as an acceptable standard. See section 4.2.1 for more details.

**2D barcode**

Sequence of data in the 2D barcode must be:

<b>FNC1</b>	<b>GS1 AI</b>	<b>GTIN</b>	<b>GS1 AI</b>	<b>SERIAL #</b>	<b>FNC1</b>	<b>GS1 AI</b>	<b>EXP DATE</b>	<b>GS1 AI</b>	<b>LOT #</b>
	01	20325021143302	21	1234567890123		17	200331	10	123456
Special character that designates it as a GS1 DataMatrix code		Sellable unit GTIN starts with a 0 Full case GTIN begins with a 2 Bundle GTIN begins with a 7		X-GEN's SN is 13 digits long	Special character to separate SN from the Exp date (because the SN is a variable length number across the industry)		Format must be YYMMDD, and DD must = last day of month of expiration		Lot # format may be alpha-numeric or numeric only


So this example, when scanned, would read:

<FNC1>0120325021143302211234567890123<FNC1>1720033110123456

The FNC1 will often be read by a scanner as a space, or sometimes a □

On the **sellable unit**, the 2D barcode will have the human readable text next to it.

Example:



I

#### 4.3.2 HOMOGENEOUS CASE / PRODUCT CASE LABEL

Below is a sample of a homogeneous case / product case label pulled directly from the HDA's *Guidelines for Bar Coding in the Pharmaceutical Supply Chain* for products sold in the U.S. The homogeneous case / product case label contains the GTIN, Quantity, Lot, and Expiration, in the linear barcodes, as well as human readable text. Note that the wrap around label has the 2D DataMatrix barcode mirrored to keep it away from the fold.

Note: Any country specific requirements that differ from the DSCSA requirements will be addressed with the specific CMO/CPO.



Corner

## 5. SERIALIZATION DATA

There will be two main processes that will require serialization data exchange between XGen DJB and the CMOs/CPO's. The first will involve the CMO/CPO requesting, and XGen DJB providing discrete serial number sets commissioned for use by specific GTIN (saleable unit level, case level and bundle level), and SSCCs for partial cases and for pallets.

The second will involve CMO/CPO provision and transmission of a serialized shipping event with commissioning and aggregation related information to XGen DJB via the EPCIS event standards v1.2.

### 5.1 SERIAL NUMBER ALLOCATION & DATA EXCHANGE

Serial number allocation and exchange process overview:

1. XGen DJB will provide POs to the CMO/CPO via the agreed to method.
2. CMO/CPO will send XGen DJB request for serial numbers and SSCCs in XML files sent via **AS2** connection (see standard file format in section 7.) Generally, **the CMO/CPO will keep a pool of 3-5 batches worth of serial numbers**, with a defined minimum quantity that will kick off a request for more SNs.
3. XGen DJB will provide a discrete set of GTIN (unit, case and bundle) serial numbers and SSCCs when requested by CMO/CPO.

Note the formats in XML Request and Response files for GTIN serial numbers and SSCC:

Example of unit GTIN serial #	<b>0100339822061716211170110045003</b>	( <b>prefix + GTIN + prefix + serial number</b> )
Example of case GTIN serial #	<b>0120339822061710212170110000452</b>	( <b>prefix + GTIN + prefix + serial number</b> )
Example of SSCC #	<b>00303398220017136200</b>	( <b>prefix + serial number + check digit</b> )

### 5.2 EPCIS COMMISSIONING AND AGGREGATION EVENTS

XGen DJB will require the CMO/CPO to provide an EPCIS v1.2 transmission via AS2 connection, combining the commissioning, aggregation, and shipping info in a single file, including the standard data. Some of the specific information:

- The corresponding XGen DJB PO number (**REQUIRED**)
- Quantity shipped (**REQUIRED**)
- Aggregation to case level (**REQUIRED**)
- Aggregation to bundle level (REQUIRED only if bundles are used)
- Aggregation to pallet level (OPTIONAL)
- GLN (REQUIRED)

Additional technical discussions may be required amongst the related parties for this topic.

See standard file format in section 8.

## 6. AGGREGATION SCENARIOS

Packaging Level	Mkt	UID	AI(21) Length/Type	Aggregation	Indicator value	Source	Extension Digit
Carton/sellable unit	US	GTIN	13 Numeric	N/A	0	XGen DJB	
Shipper – Homogeneous Case	US	Case GTIN	13 Numeric	Yes	2	XGen DJB	
Bundle	US	Bundle GTIN	13 Numeric	Yes	7	XGen DJB	
Shipper –partial case	US	SSCC	18 Numeric	Yes		XGen DJB's (preferred), or CMO's/CPO's	3
Pallet	US	SSCC	18 Numeric	Yes		XGen DJB's (preferred), or CMO's/CPO's	3

## 7. REFERENCES

Document	Link
FDA's DSCSA	<a href="http://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/">http://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/</a>
GS1 General Specifications	<a href="http://www.gs1.org/docs/gsmf/barcodes/GS1_General_Specifications.pdf">http://www.gs1.org/docs/gsmf/barcodes/GS1_General_Specifications.pdf</a>
GS1 US Implementation Guide (link to download)	<a href="http://www.gs1us.org/industries/healthcare/gs1-healthcare-us-initiative/dscsa/implementation-guide">http://www.gs1us.org/industries/healthcare/gs1-healthcare-us-initiative/dscsa/implementation-guide</a>
GS1 DataMatrix Guide	<a href="http://www.gs1.org/sites/default/files/docs/barcodes/GS1_DataMatrix_Introduction_and_technical_overview.pdf">http://www.gs1.org/sites/default/files/docs/barcodes/GS1_DataMatrix_Introduction_and_technical_overview.pdf</a>
HDA Guidelines for Bar Coding in the Pharmaceutical Supply Chain	<a href="https://www.healthcaredistribution.org/resources/hda-guidelines-for-bar-coding-in-the-pharmaceutical-supply-chain">https://www.healthcaredistribution.org/resources/hda-guidelines-for-bar-coding-in-the-pharmaceutical-supply-chain</a>
XGen Pharmaceuticals DJB, Inc. website	<a href="http://www.xgenpharmadjb.com">http://www.xgenpharmadjb.com</a>

## 8. FILE FORMATS

### GTIN SERIAL NUMBER REQUEST XML EXAMPLE

```
<?xml version="1.0" encoding="UTF-8"?>
<snm:SNMRequestType xmlns:snm="urn:tracelink:mapper:sl:serial_number_manager"
xmlns:cmn="urn:mapper:sl:commontypes">
  <snm:ControlFileHeader>
    <cmn:FileSenderNumber>10021144</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>0339822000104</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>1340956702643646</cmn:FileControlNumber>
    <cmn:FileDate>2021-06-21</cmn:FileDate>
    <cmn:FileTime>12:11:00Z</cmn:FileTime>
  </snm:ControlFileHeader>
  <snm:MessageBody>
    <cmn:RequestId>1340956702781673</cmn:RequestId>
    <cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
    <cmn:NumberEncoding>AI (01)+AI (21)</cmn:NumberEncoding>
    <cmn:ObjectIdentifier>
      <cmn:GTIN-14>00339822123456</cmn:GTIN-14>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>10000</cmn:Quantity>
  </snm:MessageBody>
</snm:SNMRequestType>
```

### CASE GTIN SERIAL NUMBER REQUEST XML EXAMPLE (FOR FULL HOMOGENEOUS CASES)

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<snm:SNMRequestType xmlns:snm="urn:mapper:sl:serial_number_manager"
xmlns:cmn="urn:mapper:sl:commontypes">
  <snm:ControlFileHeader>
    <cmn:FileSenderNumber>10021144</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>0339822000104</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>1340956532682900</cmn:FileControlNumber>
    <cmn:FileDate>2021-06-14</cmn:FileDate>
    <cmn:FileTime>12:11:00Z</cmn:FileTime>
  </snm:ControlFileHeader>
  <snm:MessageBody>
    <cmn:RequestId>1340956532818469</cmn:RequestId>
    <cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
    <cmn:NumberEncoding>AI (01)+AI (21)</cmn:NumberEncoding>
    <cmn:ObjectIdentifier>
      <cmn:GTIN-14>20339822123456</cmn:GTIN-14>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>5</cmn:Quantity>
  </snm:MessageBody>
</snm:SNMRequestType>
```

## SSCC REQUEST XML EXAMPLE

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<snm:SNMRequestType xmlns:snm="urn:mapper:sl:serial_number_manager"
xmlns:cmn="urn:mapper:sl:commontypes">
  <snm:ControlFileHeader>
    <cmn:FileSenderNumber>10021144</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>0339822000104</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>1340956329621486</cmn:FileControlNumber>
    <cmn:FileDate>2021-06-14</cmn:FileDate>
    <cmn:FileTime>12:11:00Z</cmn:FileTime>
  </snm:ControlFileHeader>
  <snm:MessageBody>
    <cmn:RequestId>1340956335021740</cmn:RequestId>
    <cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
    <cmn:NumberEncoding>AI(00)</cmn:NumberEncoding>
    <cmn:ObjectIdentifier>
      <cmn:CompanyPrefixObjectKey
filterValue="3">0339822</cmn:CompanyPrefixObjectKey>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>10</cmn:Quantity>
  </snm:MessageBody>
</snm:SNMRequestType>
```



## GTIN SERIAL NUMBER RESPONSE XML EXAMPLE

```
<?xml version="1.0" encoding="UTF-8"?>
<snm:SNMResponseMessage
xmlns:snm="urn:tracelink:mapper:sl:serial_number_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
<snm:ControlFileHeader>
<cmn:FileSenderNumber>0339822000104</cmn:FileSenderNumber>
<cmn:FileReceiverNumber>10021144</cmn:FileReceiverNumber>
<cmn:FileControlNumber>1340956702643646</cmn:FileControlNumber>
<cmn:FileDate>2021-06-14</cmn:FileDate>
<cmn:FileTime>10:05:55</cmn:FileTime>
</snm:ControlFileHeader>
<snm:MessageBody>
<cmn:RequestId>1340956702781673</cmn:RequestId>
<cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
<cmn:NumberEncoding>AI (01)+AI (21)</cmn:NumberEncoding>
<cmn:ObjectIdentifier>
<cmn:GTIN-14>00339822123456</cmn:GTIN-14>
</cmn:ObjectIdentifier>
<cmn:Quantity>10</cmn:Quantity>
<cmn:SerialNumberList>
<cmn:SerialNumber>0100339822061716211170110045003</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045004</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045005</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045006</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045007</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045008</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045009</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045010</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045011</cmn:SerialNumber>
<cmn:SerialNumber>0100339822061716211170110045012</cmn:SerialNumber>
</cmn:SerialNumberList>
</snm:MessageBody>
</snm:SNMResponseMessage>
```

## CASE GTIN SERIAL NUMBER RESPONSE XML EXAMPLE

```
<?xml version="1.0" encoding="UTF-8"?>
<snm:SNMResponseMessage
xmlns:snm="urn:tracelink:mapper:sl:serial_number_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
<snm:ControlFileHeader>
<cmn:FileSenderNumber>0339822000104</cmn:FileSenderNumber>
<cmn:FileReceiverNumber>10021144</cmn:FileReceiverNumber>
<cmn:FileControlNumber>1340956532682900</cmn:FileControlNumber>
<cmn:FileDate>2021-06-14</cmn:FileDate>
<cmn:FileTime>10:05:26</cmn:FileTime>
</snm:ControlFileHeader>
<snm:MessageBody>
<cmn:RequestId>1340956532818469</cmn:RequestId>
<cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
<cmn:NumberEncoding>AI (01)+AI (21)</cmn:NumberEncoding>
<cmn:ObjectIdentifier>
<cmn:GTIN-14>20339822123456</cmn:GTIN-14>
</cmn:ObjectIdentifier>
<cmn:Quantity>5</cmn:Quantity>
<cmn:SerialNumberList>
<cmn:SerialNumber>0120339822061710212170110000452</cmn:SerialNumber>
<cmn:SerialNumber>0120339822061710212170110000453</cmn:SerialNumber>
<cmn:SerialNumber>0120339822061710212170110000454</cmn:SerialNumber>
<cmn:SerialNumber>0120339822061710212170110000455</cmn:SerialNumber>
<cmn:SerialNumber>0120339822061710212170110000456</cmn:SerialNumber>
</cmn:SerialNumberList>
</snm:MessageBody>
</snm:SNMResponseMessage>
```

## SSCC RESPONSE XML EXAMPLE

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<snm:SNMResponseMessage
xmlns:snm="urn:tracelink:mapper:sl:serial_number_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
<snm:ControlFileHeader>
<cmn:FileSenderNumber>0339822000104</cmn:FileSenderNumber>
<cmn:FileReceiverNumber>10021144</cmn:FileReceiverNumber>
<cmn:FileControlNumber>1340956329621486</cmn:FileControlNumber>
<cmn:FileDate>2021-06-14</cmn:FileDate>
<cmn:FileTime>10:04:02</cmn:FileTime>
</snm:ControlFileHeader>
<snm:MessageBody>
<cmn:RequestId>1340956335021740</cmn:RequestId>
<cmn:PlantIdentifier
type="GLN">urn:epc:id:sgln:5704801.90000.0</cmn:PlantIdentifier>
<cmn:NumberEncoding>AI(00)</cmn:NumberEncoding>
<cmn:ObjectIdentifier>
<cmn:CompanyPrefixObjectKey
filterValue="3">0339822</cmn:CompanyPrefixObjectKey>
</cmn:ObjectIdentifier>
<cmn:Quantity>10</cmn:Quantity>
<cmn:SerialNumberList>
<cmn:SerialNumber>00303398220017136200</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136217</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136224</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136231</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136248</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136255</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136262</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136279</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136286</cmn:SerialNumber>
<cmn:SerialNumber>00303398220017136293</cmn:SerialNumber>
</cmn:SerialNumberList>
</snm:MessageBody>
</snm:SNMResponseMessage>
```

## EPCIS SHIPPING EVENT WITH COMMISSIONING AND AGGREGATION EXAMPLE

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:tl="http://epcis.tracelink.com/ns"
  xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
  schemaVersion="1.1" creationDate="2019-01-30T09:24:29Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GS1">urn:epc:id:sgln:5704801.90000.0</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GS1">0339822000104</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>1292019G3</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-01-30T08:51:31Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
    <epcis:masterData>
      <VocabularyList>
        <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
          <VocabularyElementList>
            <VocabularyElement id="0339822-3">
              <attribute id="additionalTradeItemIdentificationType">SSCC</attribute>
              <attribute id="additionalTradeItemIdentificationValue">0339822-3</attribute>
              <attribute id="manufacturerName">X Gen Pharmaceuticals Inc</attribute>
              <attribute id="drugName">XGen DJB SSCC with 3 Ext Digit (Part Case / Pallet)
                <attribute id="dosageForm">Logistics Container</attribute>
                <attribute id="strength">N/A</attribute>
              </VocabularyElement>
            <VocabularyElement id="20339822061710">
              <attribute id="additionalTradeItemIdentificationType">GTIN-14</attribute>
              <attribute id="additionalTradeItemIdentificationValue">20339822061710</attribute>
              <attribute id="manufacturerName">X Gen Pharmaceuticals Inc</attribute>
              <attribute id="drugName">COLISTIMETHATE 150mg x 1 Full Shipper </attribute>
              <attribute id="dosageForm">Vial</attribute>
              <attribute id="strength">150</attribute>
            </VocabularyElement>
            <VocabularyElement id="39822-0617-1">
              <attribute id="additionalTradeItemIdentificationType">NDC541</attribute>
              <attribute id="additionalTradeItemIdentificationValue">39822-0617-1</attribute>
              <attribute id="manufacturerName">X Gen Pharmaceuticals Inc</attribute>
            </VocabularyElement>
          </VocabularyElementList>
        </Vocabulary>
      </epcis:masterData>
    </EPCISHeader>
  </epcis:EPCISDocument>
</pre>
```

```

        <attribute id="drugName">COLISTIMETHATE FOR INJECTION USP 150 mg/VIAL </attribute>
            <attribute id="dosageForm">Vial</attribute>
            <attribute id="strength">150</attribute>
        </VocabularyElement>
    </VocabularyElementList>
</Vocabulary>
<Vocabulary type="urn:epcglobal:epcis:vtype:SourceDest">
    <VocabularyElementList>
        <VocabularyElement id="0339822000104">
            <attribute id="companyName">X Gen Pharmaceuticals Inc</attribute>
            <attribute id="street1">300 Daniel Zenker Drive</attribute>
            <attribute id="street2"/>
            <attribute id="city">Horseheads</attribute>
            <attribute id="stateOrRegion">NEW YORK</attribute>
            <attribute id="postalCode">14845</attribute>
            <attribute id="country">US</attribute>
            <attribute id="identificationType">GLN</attribute>
        </VocabularyElement>
        <VocabularyElement id="0339822000104">
            <attribute id="companyName">X Gen Pharmaceuticals Inc</attribute>
            <attribute id="street1">300 Daniel Zenker Drive</attribute>
            <attribute id="street2"/>
            <attribute id="city">Horseheads</attribute>
            <attribute id="stateOrRegion">NEW YORK</attribute>
            <attribute id="postalCode">14845</attribute>
            <attribute id="country">US</attribute>
            <attribute id="identificationType"/>
        </VocabularyElement>
        <VocabularyElement id="urn:epc:id:sgln:5704801.90000.0">
            <attribute id="companyName">Xellia Copenhagen Sharp</attribute>
            <attribute id="street1">Dalslandsgade</attribute>
            <attribute id="street2">11</attribute>
            <attribute id="city">Copenhagen</attribute>
            <attribute id="stateOrRegion">NA</attribute>
            <attribute id="postalCode">2300</attribute>
            <attribute id="country">DK</attribute>
            <attribute id="identificationType">SGLN</attribute>
            <attribute id="latitude">55.667316</attribute>
            <attribute id="longitude">12.604470999999999</attribute>
        </VocabularyElement>
    </VocabularyElementList>
</Vocabulary>
</VocabularyList>
</epcis:masterData>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>

```

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<eventTime>2019-01-30T08:51:22Z</eventTime>
<eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
<epcList>
  <epc>urn:epc:id:sscc:0339822.3001713624</epc>
</epcList>
<action>ADD</action>
<bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
<disposition>urn:epcglobal:cbv:disp:active</disposition>
<readPoint>
  <id>urn:epc:id:sgln:5704801.90000.0</id>
</readPoint>
<bizLocation>
  <id>urn:epc:id:sgln:5704801.90000.0</id>
</bizLocation>
<extension>
  <tl:itemDetail>
    <epcis:lotNumber>TEST09281701</epcis:lotNumber>
    <epcis:itemExpirationDate>2020-11-11</epcis:itemExpirationDate>
    <epcis:productID>0339822-3</epcis:productID>
    <epcis:packagingLevel>Container</epcis:packagingLevel>
  <tl:itemDetail>
</extension>
<epcis:eventID>urn:uuid:CD98211D-6FE0-1014-A733-527BCEDDE875</epcis:eventID>
<epcis:declaringParty>urn:epc:id:sgln:5704801.90000.0</epcis:declaringParty>
</ObjectEvent>
<ObjectEvent>
  <eventTime>2019-01-30T08:51:23Z</eventTime>
  <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
  <epcList>
    <epc>urn:epc:id:sgtin:0339822.206171.21700700000001</epc>
    <epc>urn:epc:id:sgtin:0339822.206171.21700700000002</epc>
    <epc>urn:epc:id:sgtin:0339822.206171.21700700000003</epc>
    <epc>urn:epc:id:sgtin:0339822.206171.21700700000004</epc>
    <epc>urn:epc:id:sgtin:0339822.206171.21700700000005</epc>
  </epcList>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
  <disposition>urn:epcglobal:cbv:disp:active</disposition>
  <readPoint>
    <id>urn:epc:id:sgln:5704801.90000.0</id>
  </readPoint>
  <bizLocation>
    <id>urn:epc:id:sgln:5704801.90000.0</id>
  </bizLocation>
  <extension>
  <tl:itemDetail>
    <epcis:lotNumber>TEST09281701</epcis:lotNumber>
    <epcis:itemExpirationDate>2020-11-11</epcis:itemExpirationDate>
  </extension>

```

```
<epcis:productID>20339822061710</epcis:productID>
<epcis:packagingLevel>Case</epcis:packagingLevel>
<tl:itemDetail>
</extension>
<epcis:eventID>urn:uuid:CD9822AD-6FE0-1014-A733-527BCEDDE875</epcis:eventID>
<epcis:declaringParty>urn:epc:id:sgln:5704801.90000.0</epcis:declaringParty>
  </ObjectEvent>
  <ObjectEvent>
    <eventTime>2019-01-30T08:51:24Z</eventTime>
    <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
    <epcList>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000001</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000002</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000003</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000004</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000005</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000006</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000007</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000008</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000009</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000010</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000011</epc>
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      <epc>urn:epc:id:sgtin:0339822.006171.1170070000013</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000014</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000015</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000016</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000017</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000018</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000019</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000020</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000021</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000022</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000023</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000024</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000025</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000026</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000027</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000028</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000029</epc>
      <epc>urn:epc:id:sgtin:0339822.006171.1170070000030</epc>
    </epcList>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
    <disposition>urn:epcglobal:cbv:disp:active</disposition>
    <readPoint>
      <id>urn:epc:id:sgln:5704801.90000.0</id>
    </readPoint>
```

```

        <bizLocation>
            <id>urn:epc:id:sgln:5704801.90000.0</id>
        </bizLocation>
        <extension>
            <tl:itemDetail>
                <epcis:lotNumber>TEST09281701</epcis:lotNumber>
                <epcis:itemExpirationDate>2020-11-11</epcis:itemExpirationDate>
                <epcis:productID>39822-0617-1</epcis:productID>
                <epcis:packagingLevel>Product</epcis:packagingLevel>
            </tl:itemDetail>
        </extension>
    <epcis:eventID>urn:uuid:CD9824D6-6FE0-1014-A733-527BCEDDE875</epcis:eventID>
    <epcis:declaringParty>urn:epc:id:sgln:5704801.90000.0</epcis:declaringParty>
    </ObjectEvent>
    <AggregationEvent>
        <eventTime>2019-01-30T08:51:30Z</eventTime>
        <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
        <parentID>urn:epc:id:sgtin:0339822.206171.2170070000001</parentID>
        <childEPCs>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000001</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000002</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000003</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000004</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000005</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000006</epc>
        </childEPCs>
        <action>ADD</action>
        <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
        <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
        <readPoint>
            <id>urn:epc:id:sgln:5704801.90000.0</id>
        </readPoint>
        <bizLocation>
            <id>urn:epc:id:sgln:5704801.90000.0</id>
        </bizLocation>
        <tl:aggregationEventExtensions>
            <tl:quantity>6</tl:quantity>
        </tl:aggregationEventExtensions>
    <epcis:eventID>urn:uuid:CD982935-6FE0-1014-A733-527BCEDDE875</epcis:eventID>
    <epcis:declaringParty>urn:epc:id:sgln:5704801.90000.0</epcis:declaringParty>
    </AggregationEvent>
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        <parentID>urn:epc:id:sgtin:0339822.206171.2170070000002</parentID>
        <childEPCs>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000007</epc>
            <epc>urn:epc:id:sgtin:0339822.006171.1170070000008</epc>

```



```

                <epc>urn:epc:id:sgtin:0339822.006171.1170070000009</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000010</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000011</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000012</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:5704801.90000.0</id>
            </readPoint>
            <bizLocation>
                <id>urn:epc:id:sgln:5704801.90000.0</id>
            </bizLocation>
            <tl:aggregationEventExtensions>
                <tl:quantity>6</tl:quantity>
            </tl:aggregationEventExtensions>
            <epcis:eventID>urn:uuid:CD982935-6FE0-1014-A733-527BCEDDE875</epcis:eventID>
            <epcis:declaringParty>urn:epc:id:sgln:5704801.90000.0</epcis:declaringParty>
        </AggregationEvent>
        <AggregationEvent>
            <eventTime>2019-01-30T08:51:30Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sgtin:0339822.206171.2170070000003</parentID>
            <childEPCs>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000013</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000014</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000015</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000016</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000017</epc>
                <epc>urn:epc:id:sgtin:0339822.006171.1170070000018</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:5704801.90000.0</id>
            </readPoint>
            <bizLocation>
                <id>urn:epc:id:sgln:5704801.90000.0</id>
            </bizLocation>
            <tl:aggregationEventExtensions>
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