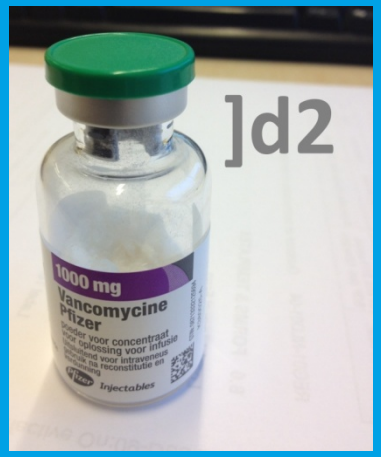
An industry perspective on medicines barcoding and bedside scanning



- Chris Dierickx
- Manager Business Development - Pfizer Global Supply – Puurs

Monday the 14th of October 2013

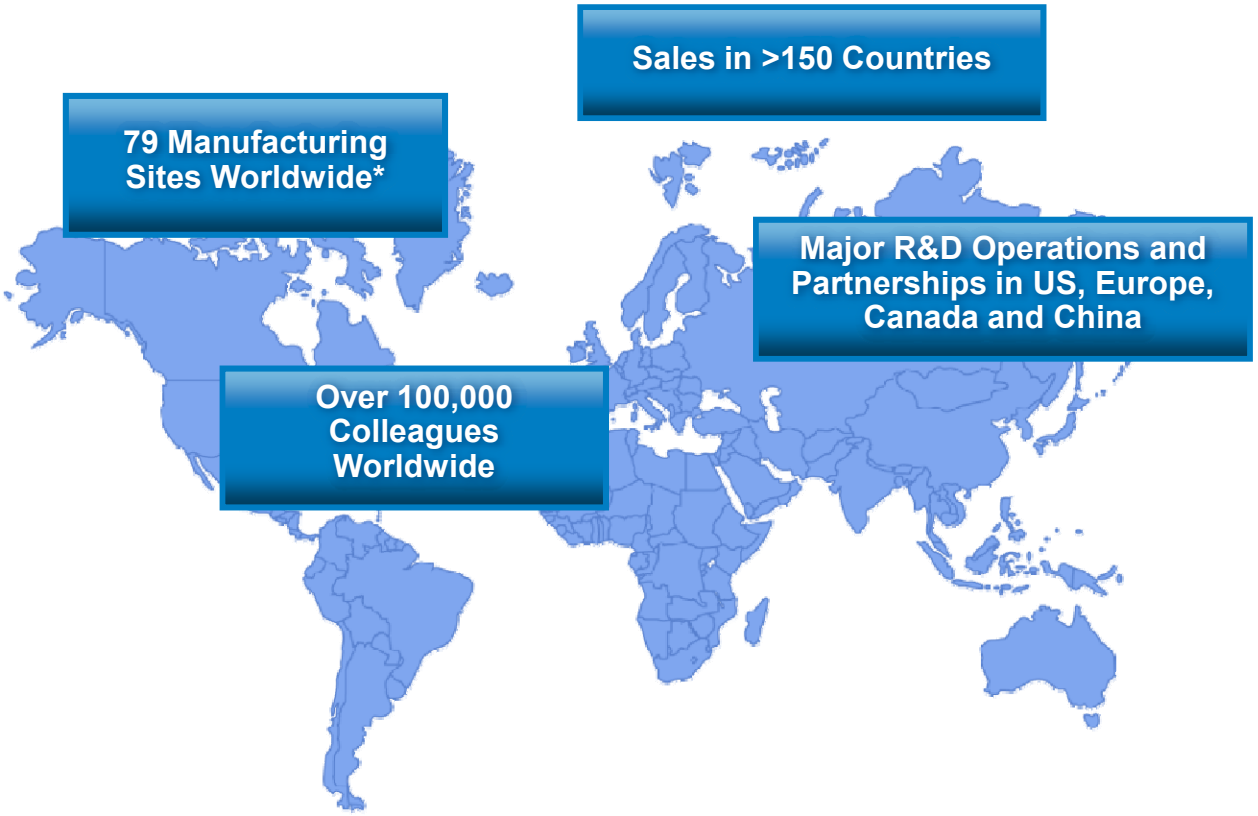
Pfizer GLOBAL SUPPLY

Content

- **Introduction**
  - Pfizer Global Supply Puurs and Business Development
- **Unit Dose**
  - Customer Requirement
  - Approach
  - Scope
  - HUD (Hospital Unit Dose) Process Review
  - GTIN and Barcode Basics, Coding and Examples

Pfizer GLOBAL SUPPLY

Our Company: Pfizer worldwide



- Founded in 1849
- CEO: Ian Read
- Headquarters: New York, NY (USA)

A Medicine Portfolio That Helps Prevent Disease and Promote & Improve Better Health and Well Being at Every Stage of Life

Pfizer GLOBAL SUPPLY

PGS Puurs

Pfizer Global Supply

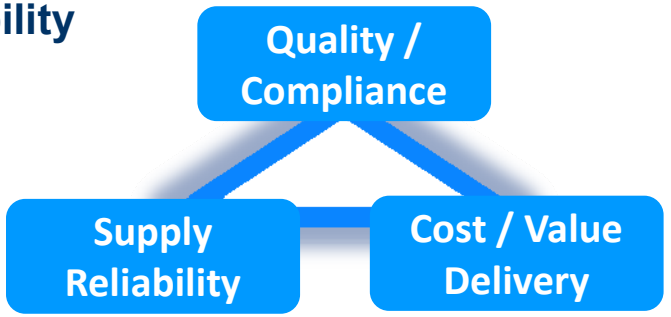
Pfizer GLOBAL SUPPLY

Our Company: Puurs history

- 1962: First European Upjohn plant in Puurs
- 1995: Pharmacia & Upjohn
- 2000: Pharmacia
- 2003: Pfizer (Warner lambert – 1999)
- 2009: Pfizer acquires Wyeth

Our Company: Pfizer Global Supply Vision

- Deliver quality products to customers in most responsive way (100% supply assurance)
- Cost- competitive
- Adding value by innovation & sustainability



- Robust and Right First Time processes
- State-of-the-art manufacturing & packaging technologies
- Continues improvement

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Customer Requirement

- **Increase patient safety and compliance** by introducing technologies to allow **bedside scanning**

Approach

- HUD (Hospital Unit Dose) as an integral component of the overall hospital strategy
- A pan-European/Worldwide approach for all Markets and Pfizer Global Supply
- Globally recognized standards for 2D Barcodes exist (GS1)
- Standards will promote
  - Consistent application across manufacturers
  - Simplified adoption for Healthcare providers

Type barcodes

Code 128

1234567890

Code 39

1 2 3 4 5 6 7 8 9 0 2

Code 93

EASESOFTSV

DataMatrix

2D

PDF417

UPC-A

1 23456 78900 5

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2D barcode

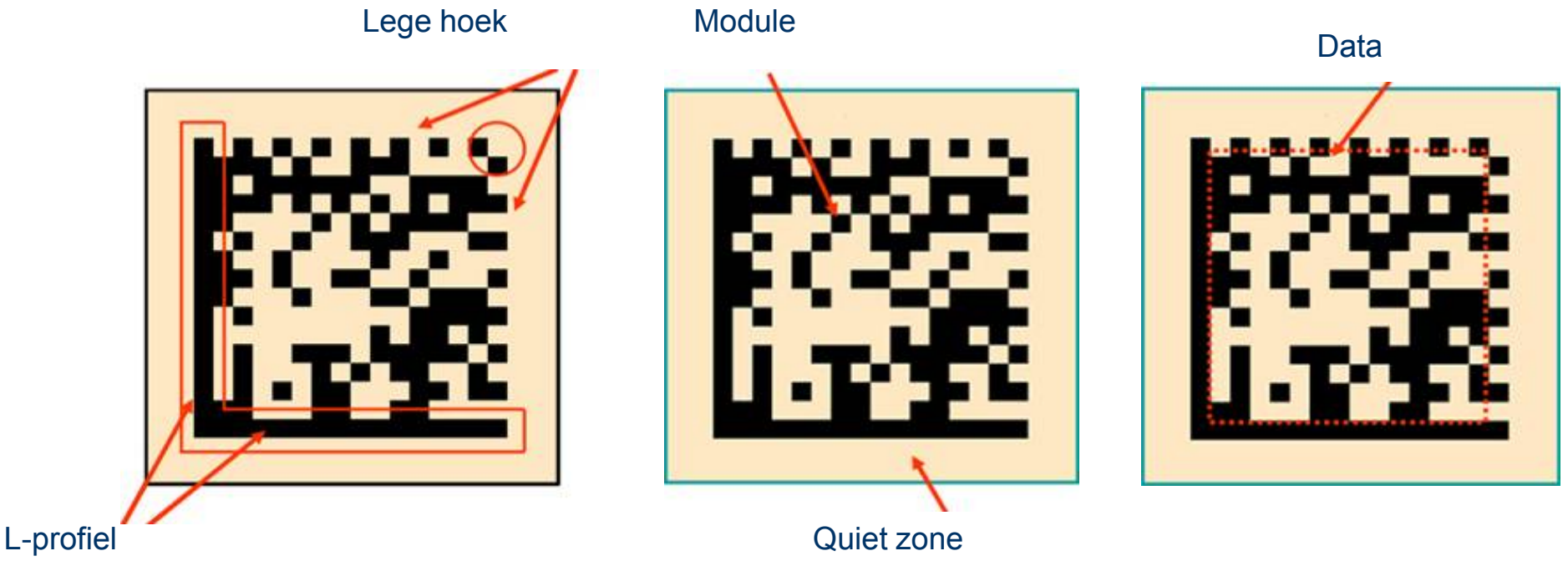
Why is Data Matrix Code popular?

Less space required

These damaged symbols are still readable

Omni-directional reading

DataMatrix ECC200



Scope

- Implementing a 2D barcode with static data (unique product identification code or Global Trade Identification Number - GTIN)
  - All Hospital products
  - Injectables and orals
  - Primary Container
  - All Pfizer Branded, Established and inlicensed products
- Implementation of a 2D barcode with variable data (GTIN, Batch #, expiration date) is not in scope

2D on carton – different scope

Utg.dat./Käyt.viim.:
Batchnr/Eränro:
HB0120
10/2005
07046264542569

HUD (Hospital Unit Dose) Process Overview

Country / Product / presentation

1

GTIN Tool

GTIN

GTIN : 12345678901234

Artwork development process

2

Approve AW + 2D code

Print + Label

3

GTIN	Product	Strength	Primary pack	Country
xxxxx	xxxxx	xxxxx	Blister	xxxxx
xxxxx	xxxxx	xxxxx	Bottle	xxxxx
xxxxx	xxxxx	xxxxx	Vial	xxxxx
xxxxx	xxxxx	xxxxx	Syringe	xxxxx

5

Hospital

4

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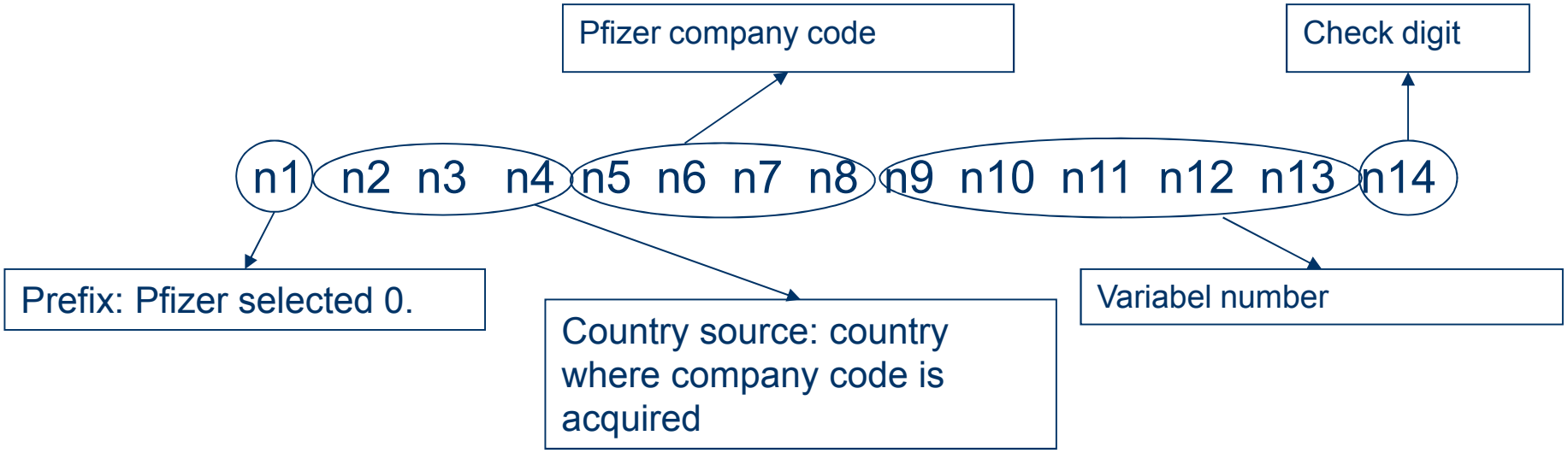
HUD (Hospital Unit Dose) Process Overview

1. Based on country/product / strength/presentation information a unique code is created: GTIN = a 14 digit code
2. The GTIN is translated in a 2D matrix barcode and included in the standard artwork design and approval process
3. New (approved) artwork is printed and used for labeling in manufacturing
   - *Verification of 2D (Content, GS1 Compliance)*
   - *ISO Grade of 2D minimum standard*
4. Relationship GTIN code – product, Country, presentation is maintained in the GTIN database
5. Incoming goods control at hospital & Scanning at bedside

GTIN and Barcode Basics

- **GTIN = Global Trade Identification Number**



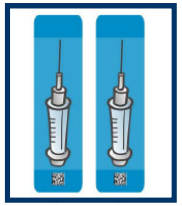
- **Data Carrier: GS1 2D DataMatrix Barcode**

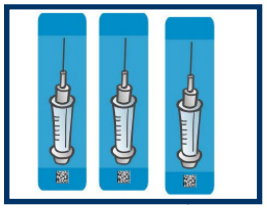
Desired HUD Data & Barcode

*It is permissible to omit the HRI of the GTIN if there is insufficient space on the component.

GTIN coding

1. Artwork Creation & GTIN assignment: GTIN 1*

2.  Item 1: It uses the Artwork & GTIN 1*

3.  Item 2: It uses the same Artwork & GTIN 1*

Once an GTIN is assigned to the formulation/container/country combination the GTIN remain unchanged when changing the Artwork/label

*Different GTIN required on the unit of sale required for the varying counts or multiplicity of unit doses

Pfizer GLOBAL SUPPLY

GS1?

- international standard and enables interoperability
- therefore anyone can interpret, since the composition of the string of characters is uniquely defined
- contains check points or references for verification on data accuracy
- Can contain more info then the linear barcode (2D and compact)
- GS compliance is a prerequisite for correct reading and interpretation in the hospitals and customers

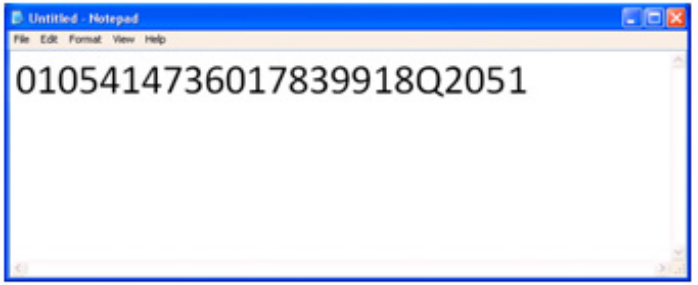
GS1 – on unit of dose

- coding exist of:
  - function codes (FNC1 – asci code <232>)
  - application identifiers (AI)
  - data
- function code determines if the datamatrix is GS1 compliant: is the start of every code
  - cannot be printed and is invisable whith a non programmed scanner
- application identifiers used:
  - 01: GTIN (the first AI – fixed lenght of numerical characters of 14 positions)
  - 243: Packaging Component Number or PCN (91)

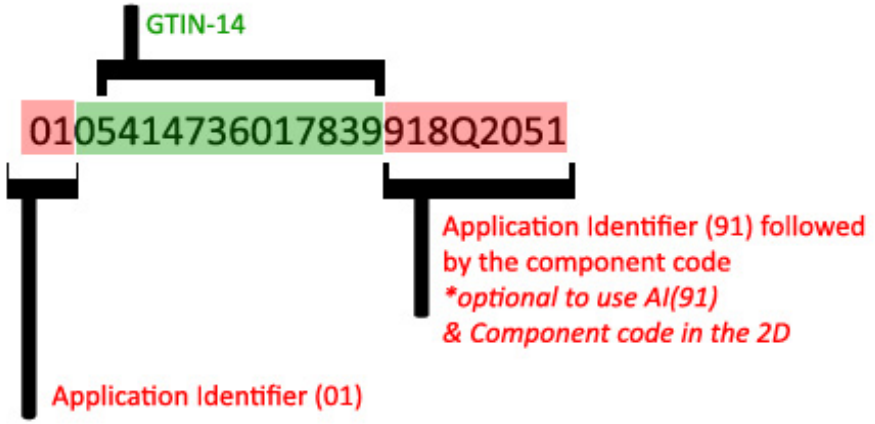
GTIN & Barcode Basics

- Reading the 2D code with Unprogrammed and Programmed Scanners
  - A Programmed 2D Scanner will often output the ISO code Identifier at the beginning of the data contained in the code
  - An Unprogrammed scanner will simply output the GTIN Application Identifier at the beginning of the data contained in the code
- See example on Next Slide

Unprogrammed 2D Handheld Scanner Output:
Raw Data Defined

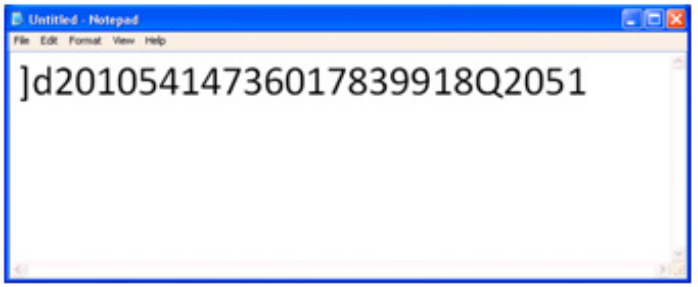


Unprogrammed 2D Handheld Scanner Output:
Raw Data Defined

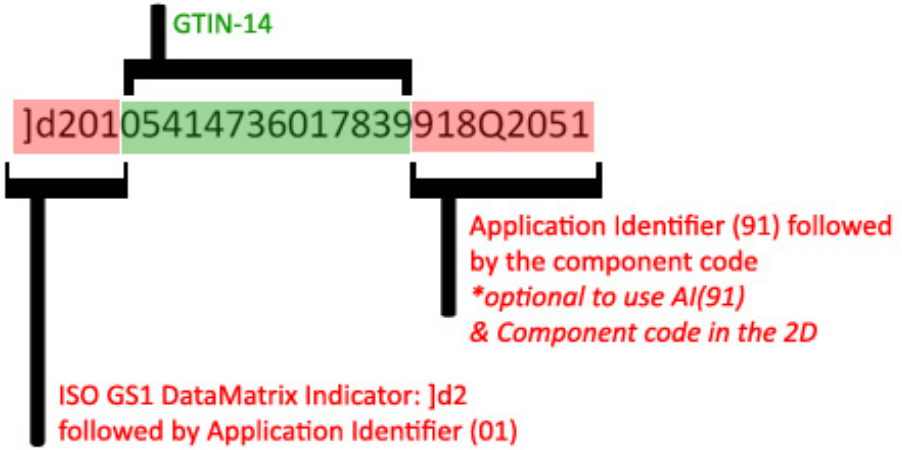


AI (91) will be replaced by AI (243)

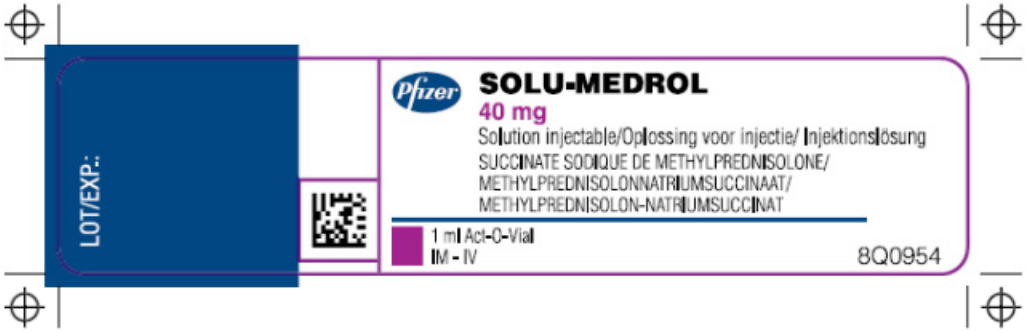
Programmed 2D Handheld Scanner Output:
Raw Data Defined



Programmed 2D Handheld Scanner Output:
Raw Data Defined

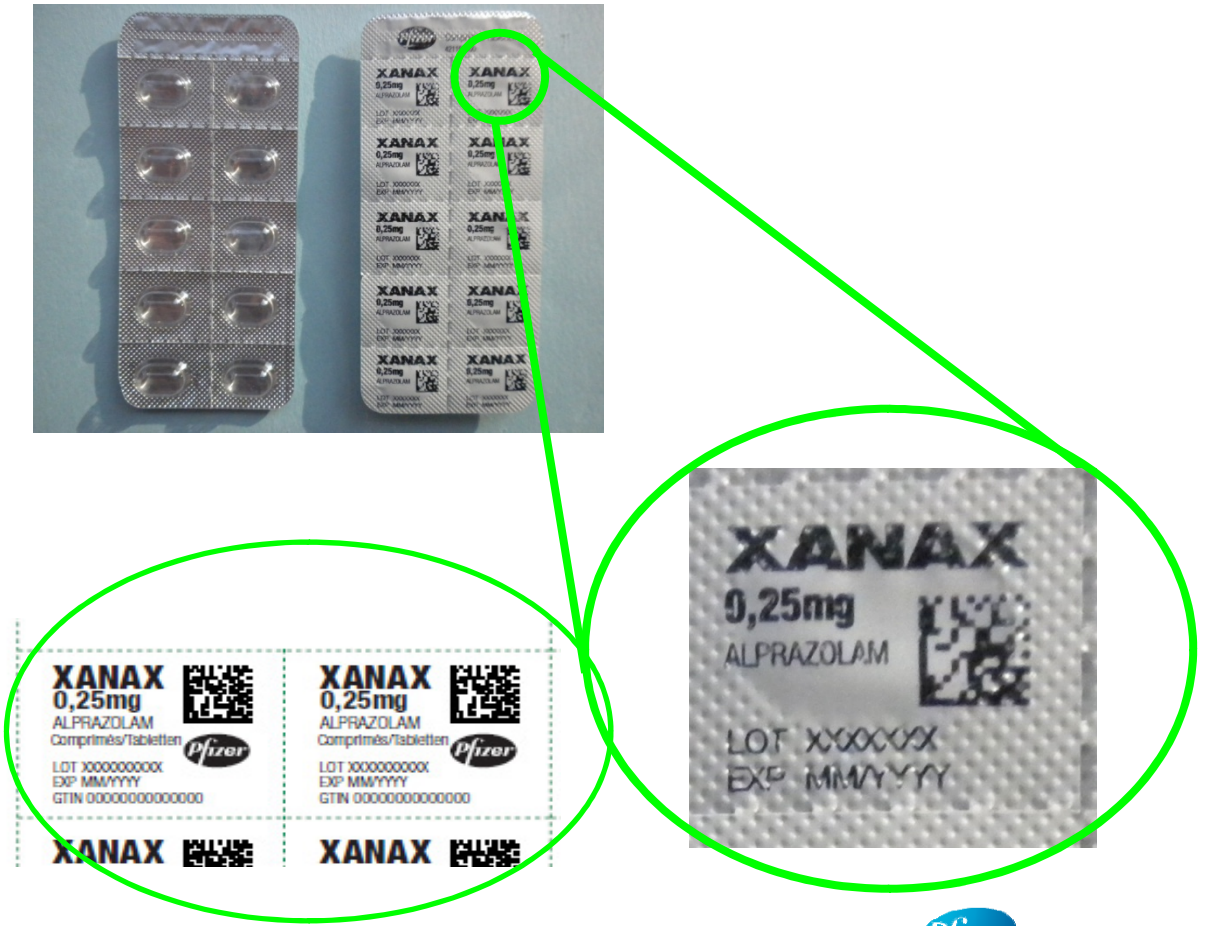


Examples



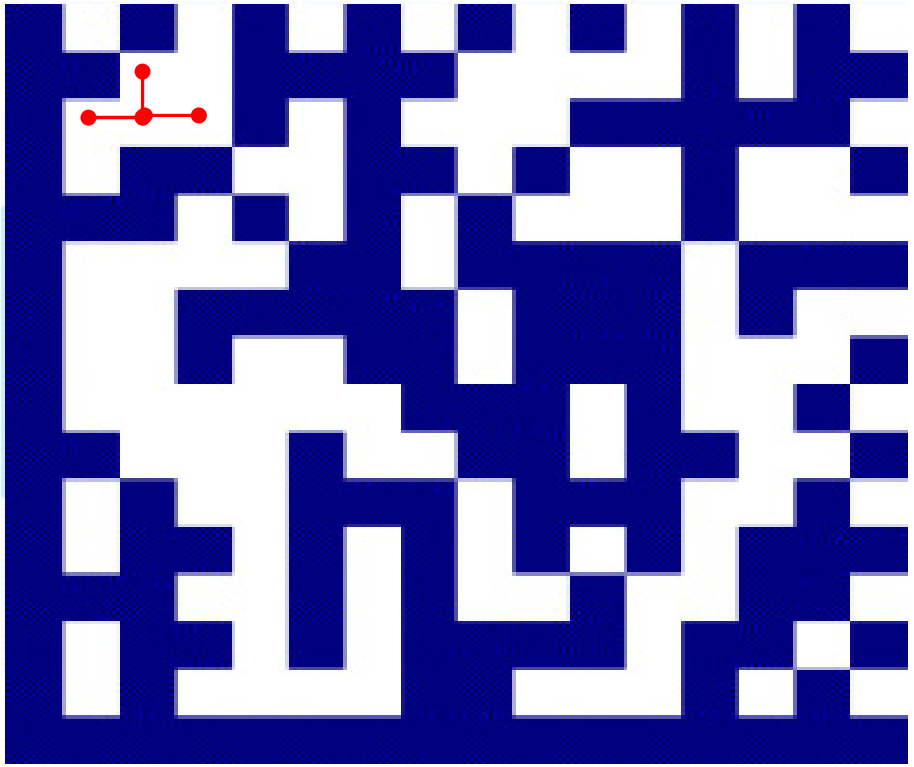
Pfizer GLOBAL SUPPLY

Examples



Pfizer GLOBAL SUPPLY

GS1 Standard



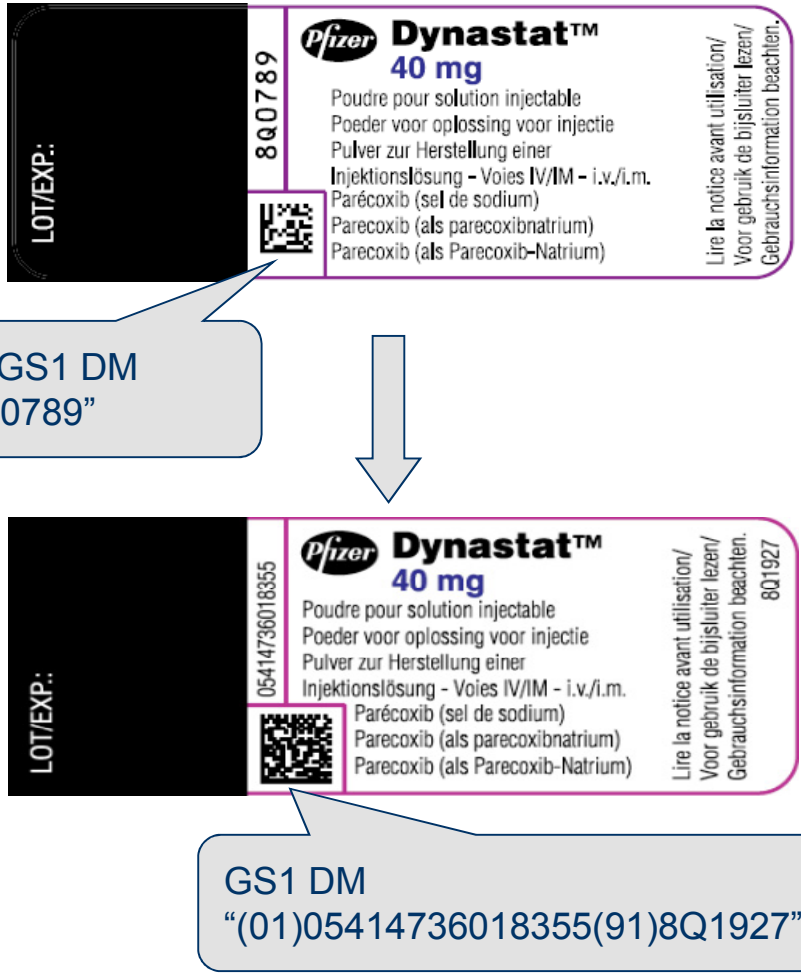
Pfizer GLOBAL SUPPLY

Examples

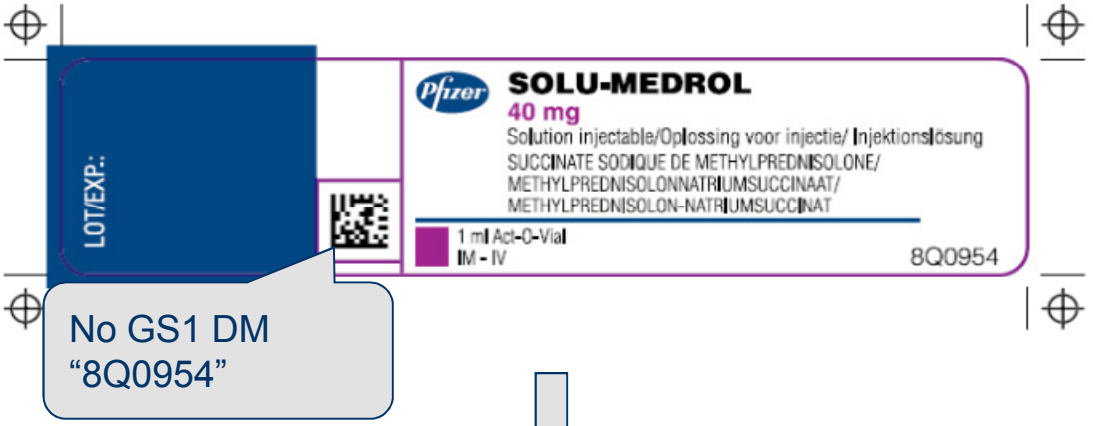
0108713332123737918Q2625

Pfizer GLOBAL SUPPLY

Examples


LOT/EXP.:
8Q0789
Pfizer
Dynastat™
40 mg
Poudre pour solution injectable
Poeder voor oplossing voor injectie
Pulver zur Herstellung einer
Injektionslösung – Voies IV/IM – i.v./i.m.
Parécoxib (sel de sodium)
Parecoxib (als parecoxibnatrium)
Parecoxib (als Parecoxib-Natrium)
Lire la notice avant utilisation/
Voor gebruik de bijsluiter lezen/
Gebrauchsinformation beachten.
No GS1 DM
"8Q0789"
LOT/EXP.:
05414736018355
Pfizer
Dynastat™
40 mg
Poudre pour solution injectable
Poeder voor oplossing voor injectie
Pulver zur Herstellung einer
Injektionslösung - Voies IV/IM - i.v./i.m.
Parécoxib (sel de sodium)
Parecoxib (als parecoxibnatrium)
Parecoxib (als Parecoxib-Natrium)
Lire la notice avant utilisation/
Voor gebruik de bijsluiter lezen/
Gebrauchsinformation beachten.
8Q1927
GS1 DM
"(01)05414736018355(91)8Q1927"

Examples



No GS1 DM
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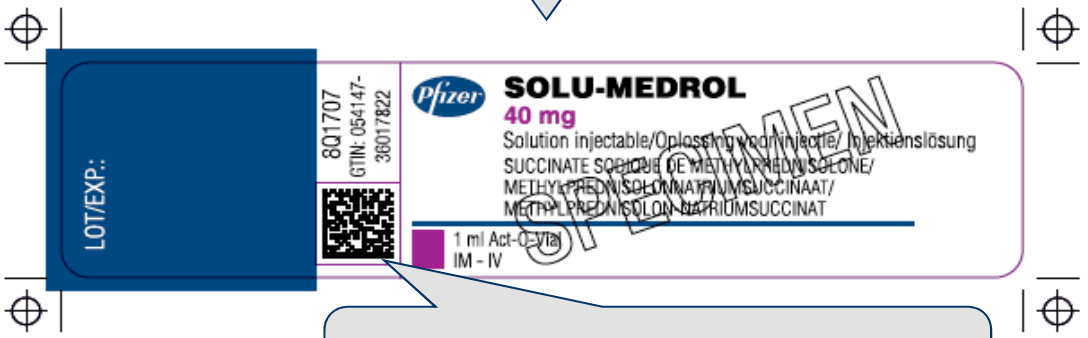

GS1 DM
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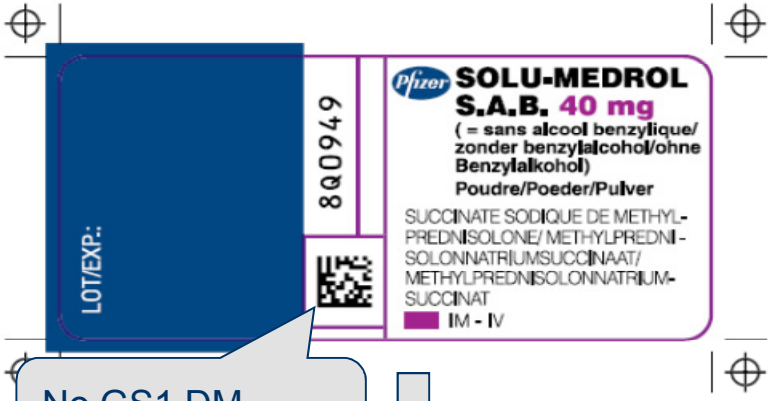

No GS1 DM
“8Q0949”

GS1 DM
“(01)05414736017839(91)8Q1708”

UPPLY

An industry perspective on medicines bar coding and bedside scanning

Thank You – Q&A

Chris

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