



# NCIS GUIDE Barcode Functionality in the ACU

# 1 Background

Barcode functionality can be used in the Aseptic Unit in two settings

- During lot management
- During tray set up

In order to understand barcode functionality in these setting it is necessary to distinguish between the two types of barcodes found on a product;

1. Linear barcode- this contains the EAN number (13 digits number printed below the barcode) and is unique for each product and strength.



2. Matrix barcode- contains information about product identification (EAN or GS1 numbers), expiry and lot (batch) number.





- All barcode scanners used with NCIS in the Pharmacy must be installed with the most up to date drivers for that device and configured as Serial Scanners to work with Matrix Barcodes
- Test all newly installed barcode scanners in lot management and tray verification using both correct and incorrect matrix and linear barcodes to ensure correct operation

# 2 Lot Management

If a drug product has a 13 digit EAN code it will be entered into the Master Drug File, this allows the barcode to be used during Lot Management. *Note: entering the EAN number in the Master File is completed by the NCCP* 



- 2.1 Scanning the Linear Barcode
- If the linear barcode is scanned into the designation field, the system will identify the product strength associated with that linear barcode.

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Lot management p		) <b>0</b> ↓		×
Show lots from: Products		Preparation	site:	<b>_</b>
Designation:	a I	Display blo	cked art	des
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• If there are no product strengths in the NCIS drug file with the scanned barcode the following screen will appear

Lot management
Could not find lot or article with the barcode ' <b>8715131023072</b> '.

- In this case the user needs to send a picture of the box, folded flat, making sure to include both linear and matrix barcodes to <u>ncis@cancercontrol.ie</u> so the drug can be built on the system
- When you scan a linear barcode for a product that has been set up the following screen will appear

•

•

<b>O</b>	Enter lot number	x
	Enter lot number	
	Barcode of the article: 8715131023072 Article: Mvasi 25 mg/mL Concentrate for solution for infusion 100mg	
Lot number:		Ŷ
🖺 Add new lot	🗸 ок 🔰	Cancel

Search for your lot number using the drop down menu

If the lot is not available at the site then click on Add new lot and manually enter the lot and expiry

Lot management		ク ①	× ↑ ↓ ₺ ⊗ 1
Show lots from: v			Preparation site: NCIS V
Designation: [WVasi 25 mg/mL Concentrate for solution for influsion 100mg Data for all preparation sites		μγ.	Display blocked articles
Lot no:	Internal:		Expiration:
Recalled Trial product	Barcode:		
Data for current preparation site			
Number: Price:		Weight:	g Determine weight <f4></f4>
Preferred Blocked		Status: New	Modify
Display used lots			Add Cancel

• If the lot is available from the dropdown list then select the lot number and press ok, the user will then be presented with an add lots pop up where they can update exactly how many products they are adding

🗘 Add 🗙						
Add						
Mvasi 25 mg/mL Concentrate i infusion 100mg, Lot no. 11423	for solution for 90A					
Quantity old: 3 Pcs						
Add: Pcs.						
Quantity new: 3 Pcs						
Sec. No.	K Cancel					

#### 2.2 Scanning the Matrix Barcode

• If the matrix barcode is scanned into the designation field, NCIS will identify the product strength as well as the batch and expiry



- If there is no product strength in the NCIS drug file that matches the barcode additional options will be made available. In this case the user needs to send a picture of the box, folded flat, making sure to include both linear and matrix barcodes to <a href="mailto:ncis@cancercontrol.ie">ncis@cancercontrol.ie</a> so the drug can be built on the system
- If the user scans the matrix barcode and they are the first site to scan the product strength with the encoded lot they will be presented with the following message

Lot management	
No lot found with the GS1 barcode '01076133260	1974321100000211350141721043010H0356H13'.
ОК	

• Once the user has pressed OK they will be presented with a pop up box where they will be asked to choose the lot from the drop down menu, or, if the lot is not there, click add new lot

0	Enter lot number	x
	Enter lot number	
	Barcode of the article: 010761332602087921100000193068651723063010B2218H23 Article: Kadcyla 20mg/mL Powder for solution for infusion 160mg	
Lot number:	1	ŀ
🖺 Add new lot	Sector Cance	4 i

• Once the user has clicked add new lot the lot management page will have auto populated with the lot number and the expiry so the user will just have to enter the amount they are adding and, if they choose, they can also enter a price

Show lots from	n: Products 🗸				Preparation site: TRAIN 🗸
Designation:	Kadcyla 20mg/mL Powder for solution for infusion 160mg			₽	Display blocked articles
Data for all p	reparation sites				
Lot no.:	82218H23	Internal:		1	Expiration: 30/06/2023
NDC:	-	Barcode:			
Recalled	Trial product				
Data for curr	ent preparation site				
Number:	Price:		Weig	ht: g	Determine weight <f4></f4>
Preferred	Blocked		Status:	New	Modify
Display use	d lots				Add Cancel

• If the user scans the matrix barcode and the lot number already exists in another prep site but not in theirs the designation field will populate with the drug, the brand and strength

Show lots from:	Products	¥			
Designation:	gnation: Gemcitabine 40 mg/mL Actavis Concentrate for solution for infusion 2000mg				

- From here the user clicks the 'New' button, once this is pressed the lot number and expiry fields will be open to enter information
- The user can then scan the matrix barcode again and the lot number and expiry fields will auto populate with the correct information
- Once this is done the user can enter the amount of stock they are adding and a price if they so choose
- Do not enter a barcode in the Barcode or Internal Number Fields

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Lot management		× ↑ ↓ @ ⊗  🗊
Show lots from: Products		Preparation site: CGH V
Designation: Gericitable 40 mg/mL Actavis Concentrate for solution for infusion 2000mg		Display blocked articles
Data for all preparation sites           Lot no.:         08A5042           NDC:	Internal: Barcode:	Expiration: 30/04/2022
Recalled Trial product		
Data for current preparation site           Number:         Price:           Defended         PRecland	Weight:	g Determine weight <f4></f4>
Diocked	Status:	Miodity
Display used lots		Add Cancel
Lot no.	A X Status T Type Expiration Total In prep. Used In use Remainder	r Avail. Price Weight (g)
Show consumption details Print barcode		<b>+ - 2</b>

• If the user scans the matrix barcode and the lot number already exists in the users prep site they will be presented with the add lots pop up where they can enter how many lots they are adding and press ok

🗘 Add					
		Add			
Kadcyla 2 infusion 1	0mg/mL i 160mg, Lo	Powder for so t no. B2218H2	lution for		
Quantity	/ old:	6 Pcs.			
Add:		Pcs.			
Quantity	/ new:	6 Pcs.			
	Γ	<b>√</b> OK	样 Cano	el	

- 2.3 Adding a new lot and manually adding products that don't scan
- Search for the product by either free-typing the drug name into the search box or by scanning the matrix barcode
- When the correct drug has been found click 'new'

Data for all preparation sites			
Lot no.:	Intern	:	Exp.:
NDC:	.∏, Barcoo	8	
🗏 Recalled 📕 Trial product			
Data for current preparation site			
Number: Price:			Weight: g Determine weight <f4></f4>
Preferred Blocked			Status: Modify
Display used lots			New Edit Delete
Lot no.	A X Status T Type	Expiration Total In prep. Use	d In use Remainder Avan. Price Weight (g)

- The Lot Number and other fields will now be open for entering information
- If the matrix barcode is scanned into 'Lot no' field the lot number and expiry fields will be populated (See screenshot below). The number of units can then be added manually.
- In some cases e.g. dose banded products or products that don't contain a barcode, the barcode cannot be scanned. In this scenario the Lot and Expiry can be added manually into this screen
- Along with the number of units you are adding to the system you can also add a price

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Lot management	🗙 ↑ ↓ 🗘 🛛 😫 🗉 🛛 🤇
Show lots from Products	Preparation site:
Designation CMBDplatin Taxa Concentrate for solution for infusion 800mg	Display blocked articles
Data for all preparation sites	
Lot no: DR233MD nternak	Dep: [12/05/2021
NCC Barode	
Recalled 1 Trial product	
Number: Price: Price	Weight:         g         Determine weight <f4>           Status:         Nem         Modily</f4>
F Display used lots	AddCancel

- The Internal box is not generally used in NCIS, however if needed additional information can be added here.
- The NDC box is used to insert the manufacturer of outsourced dose banded products
- **NEVER complete** the Barcode or enter a barcode in the Internal field as any barcode entered here will override the barcode in the drug file

Data for all p	reparation sites			
Lot no.:		Internal:	Expiration:	
NDC:	\$	Barcode:	]	
Recalled	Trial product			

## 2.4 Setting Blocked or Preferred Lots

NCIS will select lot numbers of shortest expiry to use in preparations. This can be overridden by marking lots as 'preferred' or 'blocked'. Preferred lots will be selected ahead of shorter expiry lots. Blocked lots will not be selected for use.

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Lot management					P ⊙ 1	1 🖬 💿	× ↑ ↓ @ (
Show lots from: Products 🚽 Designation: Perjeta Concentrate for solution for infusion 430mp						, 	Preparation site 00H
Data for all preparation sites Lot no: [12345 NDC]      Reselled 「 Trial product		Internal D Barcode	7013326019743				5p; 90/04/2020
Data for current preparation site Number Price Preferred Proce Bocked					Weight Status:	0	Determine weight «F4» Modify
E Display used lots							Add Cancel
Lot no.	X Status	т Туре	Expiration Total	In prep. Used	In use Remainder	Aval.	Price Weight (gl

- 3 Tray set up
  - Once pharmacist verification has occurred the medication will be available in the 'set up preparation' screen

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Set up preparation					×
Orders Preparation sets			Preparation site:	GUH 🛒 He	ıp <f1></f1>
Medication filter       Filter       Period: Today       (from 19/02/2020       Center / unit: [All centers and units)   Pat. no.:  Patient:	Medica IF Mair IF Co-r	tion type n medications medications	Preparation Hazardous F Setup: Apprv. &	Display volur	netric
1 medications in the list				Refr	esh list
🗶 Med. no. Order number Administration 🗠 Product(s)	Container	Patient	Patient number	Unit	
x 22009 19/02/2020 16:00 Perjeta Concentrate for solution for infusion 420mg 250mL NaCl 0.9% Freeflex bag by intravenous infusion 2 h	Freeflex bag	DALLAS JON	Y1234576	GUH - GUH W	/ard I

• Click on the medication to create/edit the parts list. NCIS will select the Lot Numbers with the shortest expiry, they can also be changed if required. Once Lots are selected click 'barcode verification' to check the trays contents.



- The barcode verification screen shows which products can be scanned to verify and which ones need to be verified manually.
  - Products that have a red highlight can be barcode verified, as shown below:



• Products without a red nignlight must be verified manually, as shown below:



4 Barcode verification of Trays

To barcode verify products which may be scanned, either the Matrix Barcode or Linear barcode can be scanned. However, the behaviour of each barcode type needs to be considered.

#### 4.1 Correct matrix barcode scanned

NCIS compares **both** the **lot number** and the **product barcode** of the scanned product to the information in Masterdata. If this matches the product will be verified.

A 10 Cos ** 2 45 07 12 45 07 12 45 12 57 * coto, test - NOS, Test, Phanel, NOS, Test, Phanel, THAL & GUH		- 6 ×
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Create/edit parts list		×
Farmed preparation films: 21/02/2020 21:217 Preparation method. Walumatric 🐷		
Products		
CARBOplatin Teva Concentrate for solution. Tor Influsion: 450mg bit 150mg (2931421395012324980) Samances Using		150mg 👔 🖹
Total typings In Lise (JA: Syring: SML polycopylere		
Containers and additional articles (per medication)		2
Med. 2 2055, DALLAS JOH, Potent no. 1223-076, for Fei ZU02/2007 Label (RLH - QLH Word) bx Glacces 5% 100ml Bag Varia non-PVC Baster (IRC15/6), bx Conglessity Basd 2 (1, TEST CHAVEG OF LOT NAME) (1)		<u>i</u> 2
Сконсирант тех силствии и и визыки том визык солну и солк. Солски и и, су планитолитичии		-
Enstructions Defect to the second sec	rcode verification	Confirm preparation
Shars Set Share Sh	Save parts list	📕 Reject parts list

#### 4.2 Incorrect matrix barcode scanned

NCIS compares **both** the **lot number** and the **product barcode** of the scanned product to the information in Masterdata. If this does not match the product will not be verified and the yellow banner shown below will appear on screen.

No matching entry has been found in the list for the scanned article. Please check the selected article.					
		Confirm manually	🕼 Remove article	👔 Interrupt	💥 Discard

#### 4.3 Linear barcode scanned of correct product

NCIS compares **only** the **product barcode** of the scanned product to the information in Masterdata. When this matches, the product is verified.

**NOTE:** When the linear barcode is scanned at this point only the correct product identity can be verified, lot number is not considered.

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Create/edit parts list		×
Parnel preparation time: 21/02/2020 12:17 Preparation method: Volumetric 🔪		
Products		
CORROPARIA Teva Concentrate for solution for influsion 450mg is 150mg (23142118047123880) Remember Umg		150mg 👔 📝
Total sphages Ix Lue Lik Spring: Shal, polypropylere		
Containers and additional articles (per medication)		2
Medie 22098, DALLOS XM, Poterce no.: 1/221475; for Frit 22092/2020 14:00 (GM - GH Word) Ex Glocose 5% 100mL Bog Vallo non-PVC Baster (8C15/6], Ex Complexity Band 2 (1, TST CHANGE OF LOT NAME) (*)		<u>i</u>
Showchar She block	IBM Barcode verification	Confirm preparation
JINON JININ	• successory	and contract that a set

## 4.4 Linear barcode scanned of incorrect product

NCIS compares **only** the **product barcode** of the scanned product to the information in Masterdata. If this does not match the product will not be verified and the yellow banner shown below will appear on screen.

No matching entry has been found in the list for the scanned art	icle. Please check the select	ed article.		
	Confirm manually	Remove article	11 Interrupt	💥 Discard