



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



NCIS QUICK 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.



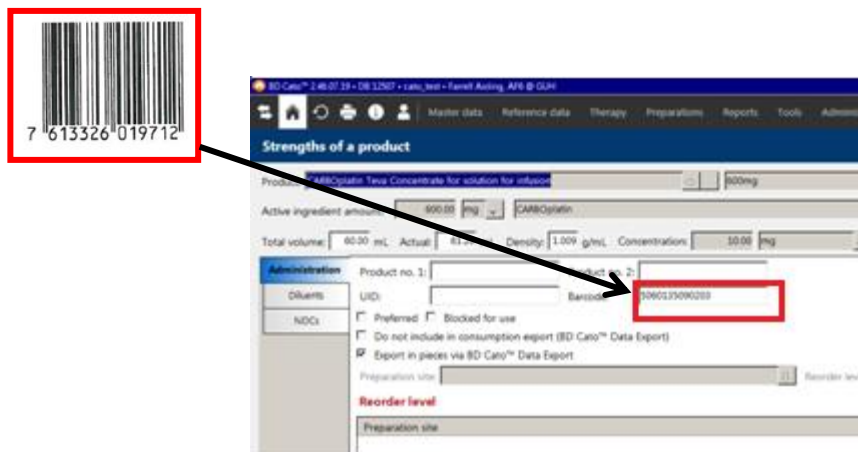
2. Matrix barcode- contains information about product identification (EAN or GS1 numbers), expiry and lot (batch) number.



- All barcode scanners used with NCIS must be installed with the most up to date drivers for that device and configured as Serial Scanners
- 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
- BD CATO has experience with the following barcode scanners, please contact the Project Team or CATO Support for advise on using alternative barcode scanners:
 - Datalogic Matrix 210 (not Matrix210n)
 - Datalogic Gryphon 4400 or 4500 Series
 - Zebra/Motorola - Symbol LS4208
 - Zebra/Motorola - Symbol LS3508

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*

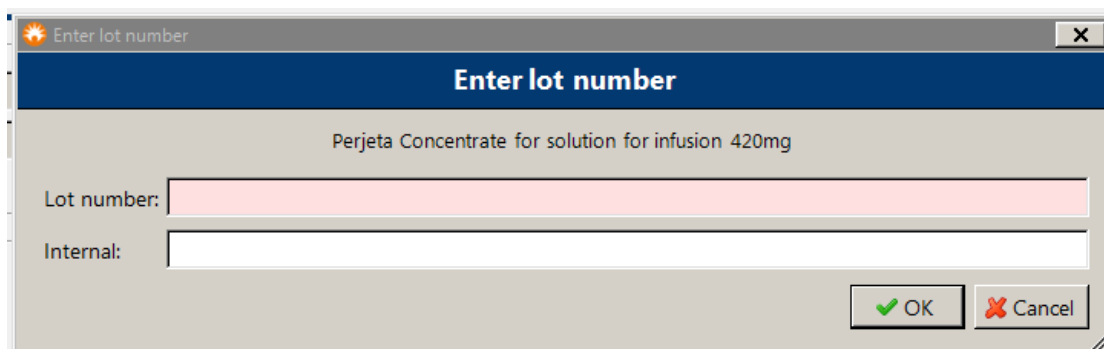


2.1 Scanning the Linear Barcode

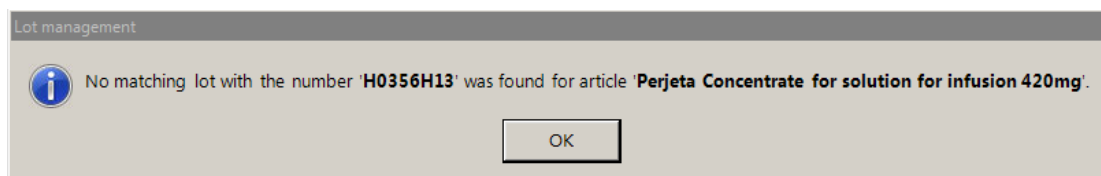
- If the linear barcode is scanned into the designation field, the system will identify the product strength associated with that linear barcode.



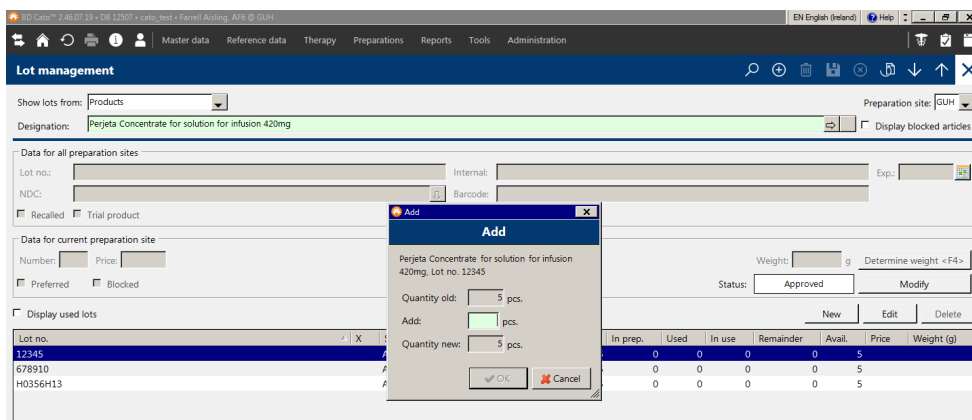
- If there are no Lots for the Product Strength the following window will appear



- Enter the Lot number of the product
- If the lot is not available at the site the "Enter lot number" box will disappear or the following message will appear



- If there are active Lots for the Product strength NCIS will automatically prompt addition to the lot number that has the shortest expiry.



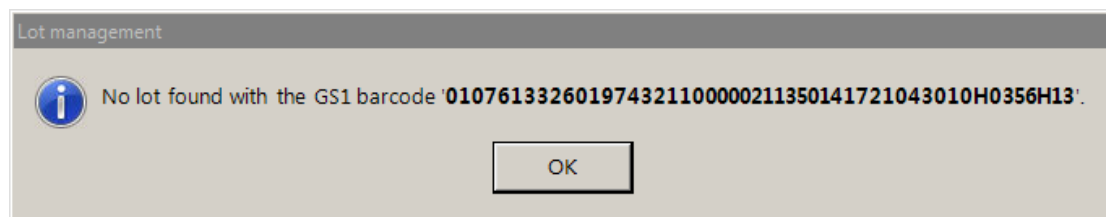
- If the Lot you wish to add is not the one with the shortest date click cancel. Select the Lot you wish to add to and click the + icon.

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 the Lot is not in NCIS no additional options will be made available if the Lot is not in your prep site the following warning will appear.



- If the Lot for the Product and Product Strength is available in your prep site the Add Lots pop up will appear

The screenshot shows the 'Lot management' window in the software. The 'Add' pop-up window is open, displaying the following information:

- Product:** Perjeta Concentrate for solution for infusion 420mg
- Lot no.:** 12345
- Quantity old:** 5 pcs.
- Add:** 1 pcs.
- Weight:** g
- Determine weight:** <F4>
- Status:** Approved
- Buttons:** New, Edit, Delete

The background window shows the 'Data for all preparation sites' and 'Data for current preparation site' sections, with fields for Lot no., Internal, Exp., NDC, Barcode, and various checkboxes like 'Recalled', 'Trial product', 'Preferred', and 'Blocked'.

- 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. The number of units can then be added manually.



The screenshot shows the 'Lot management' window with the 'Lot no' field populated with the value '12345'. The 'Exp.' field is also populated with the date '11/05/2021'. The 'Add' button is highlighted with a red box. An arrow points from the barcode image above to the 'Lot no' field.

- If desired the Lot and Expiry can be added manually into this screen

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.

3 Tray set up

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

- 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:

Prod. no.	Lot no.	Status
543Q623632		0/1

- Products without a red highlight must be verified manually, as shown below:

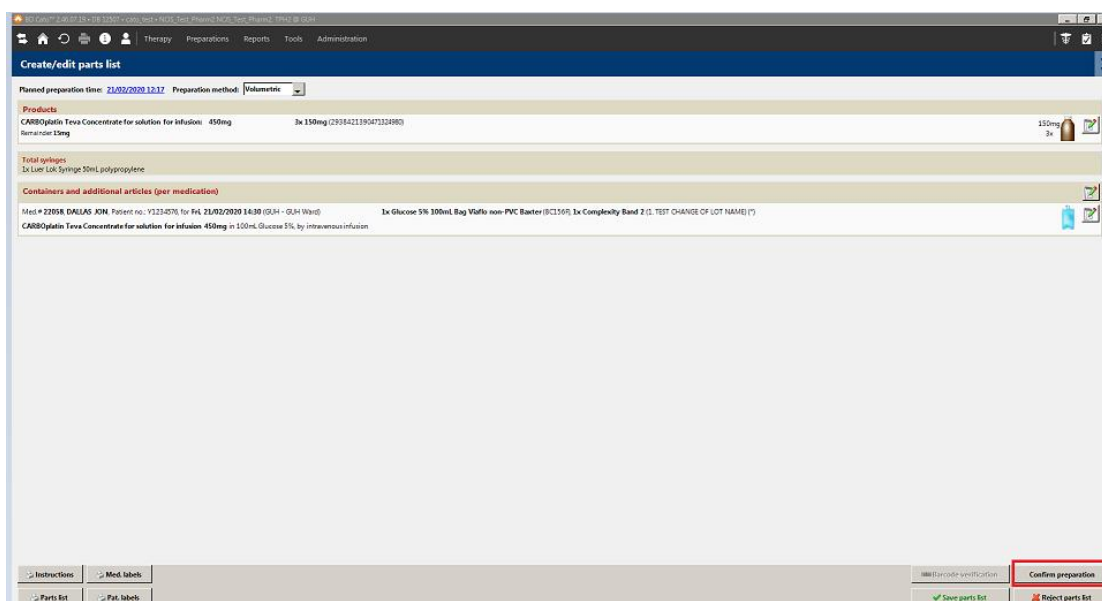
345123412341234	1
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4 Barcode verification of Trays

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.

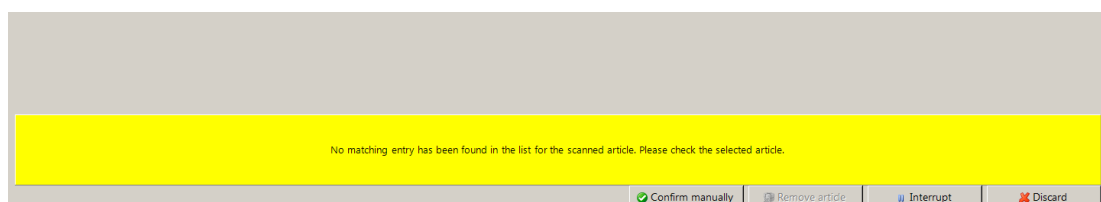
4.1 Correct matrix barcode scanned

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.



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.



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.

The screenshot shows the 'Create/edit parts list' window in the NCIS application. The 'Planned preparation time' is 21/03/2020 12:17, and the 'Preparation method' is Volumetric. The 'Products' section lists CARBOplatin Teva Concentrate for solution for infusion 450mg, 3x 150mg (29384211395471324983). The 'Total syringes' section shows 1x Luer Lok Syringe 50mL polypropylene. The 'Containers and additional articles (per medication)' section lists Med # 2270A DALLAS JIM, Patient no: Y1234567, for RA 21/03/2020 14:30 (SU4 - GU4 Ward), 1x Glucose 5% 100mL Bag Vialto non-PVC Bagster (BCL350), 1x Complexity Band 2 (S, TEST CHANGE OF LOT NAME) (P). The bottom right corner features a red-bordered 'Confirm preparation' button, along with 'Barcode verification', 'Save parts list', and 'Reject parts list' buttons.

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.

The screenshot shows a yellow banner with the text: 'No matching entry has been found in the list for the scanned article. Please check the selected article.' Below the banner, there are four buttons: 'Confirm manually', 'Remove article', 'Interrupt', and 'Discard'.