National Cancer Control Programme

National Cancer Information System

NCIS GUIDE

For Recording Volume Checks in the Pharmacy

1. Background

NCIS.Med provides a solution for compounding SACT and other associated drugs. There are always challenges when moving from a predominantly paper-based system to an electronic system, including documentation of preparation steps. This guide gives some of the options available in NCIS.Med for recording the volume check during volumetric preparation.

2. Guided Preparation

It is possible to undertake preparation using a Guided Process in NCIS.Med. This usually involves the preparer using a screen inside or near the isolator which gives step by step verifiable instructions at each preparation step.

1. For guided preparation where a technician is compounding in an isolator with a screen, the technician doing the compounding is logged in (green box in Figure 1).
2. In the bottom left corner of Figure 1 (red box), a second person logs as the “assistant/check.”
3. The responsibilities of this “assistant/check” should be defined in local workflow processes, but could, for example, be a technician/pharmacist who does volume checks during compounding.

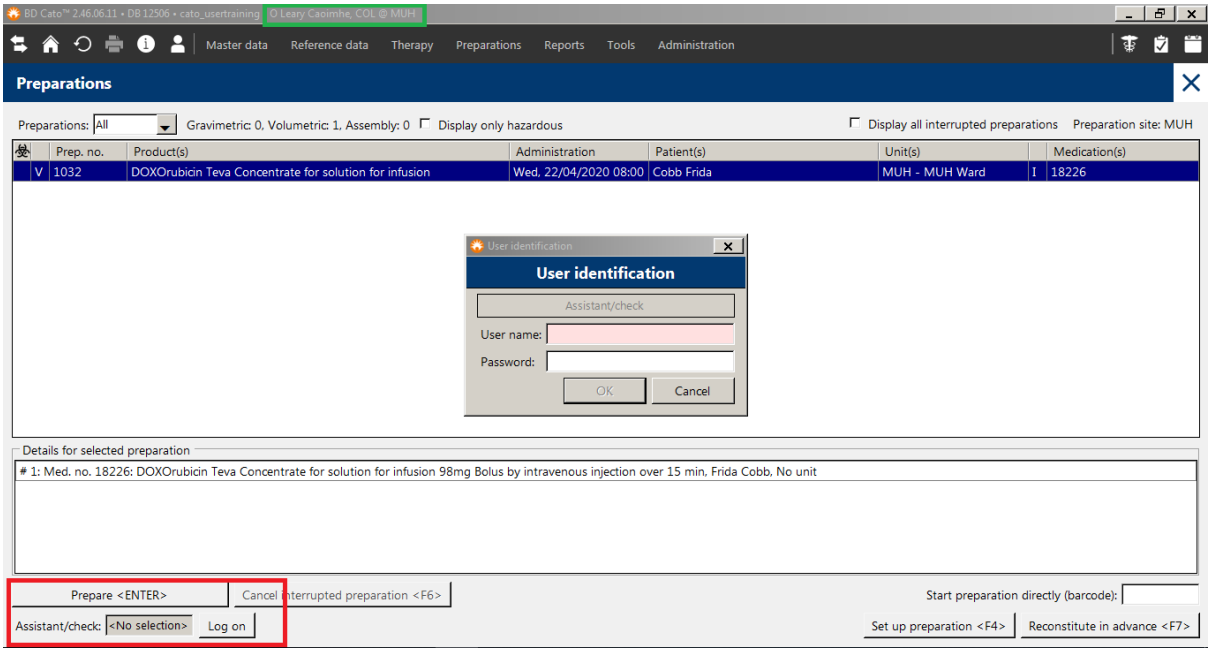


Figure 1: Assistant/check log in screen

4. Working through the steps of the guided preparation, depending on local workflow, it is possible to choose where checks take place. The preparation can be interrupted if a different volume checker needs to take over for some reason (using the F3 function key on the first page of the guided preparation, use the F4 function key to interrupt the preparation at any other stage), it is also possible to skip certain checks, add, remove or block vials, restart the preparation and send the preparation back to the setup screen :

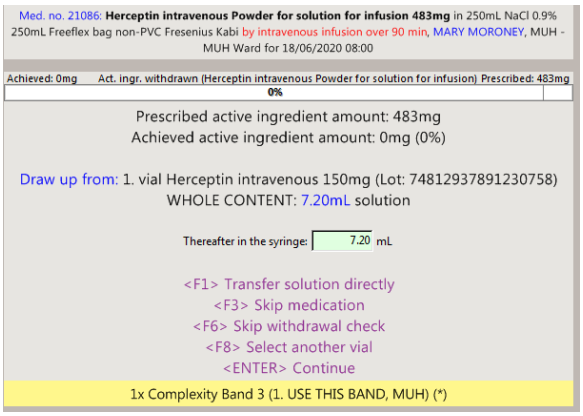


Figure 2: example of guided preparation step

5. When you have gone through all the guided steps and there is some drug left over in the vial you will be told how much is left (*figure 3*) and asked if you want to keep this as a remainder to be used again (press F1 function key) or if you want to reject it and record the drug as a loss (press Enter)(*figure 4*)

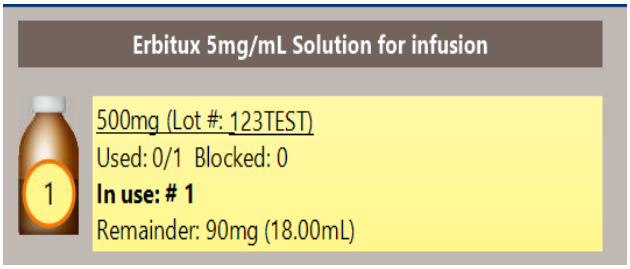


Figure 3: extract from remainder screen

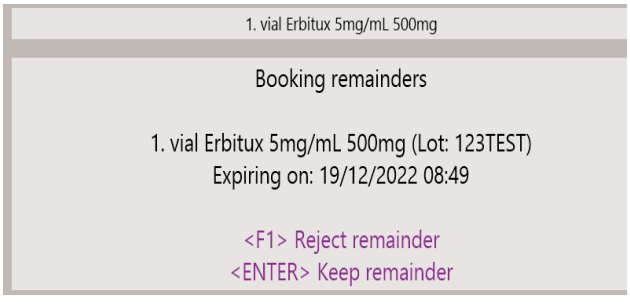


Figure 4: example of remainder screen options

If you chose to keep the remainder you will be given a remainder number (*figure 5*), this number should be noted on the vial and a corresponding label will print with the number on it, the details of the drug, the quantity remaining and the expiry, you can then attach this label to the correct vial.

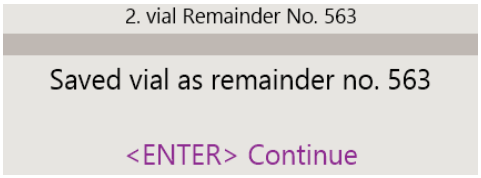


Figure 5: example of remainder number

6. When the preparation is completed, there are a number of places where the preparation of the product can be traced. When using the guided preparation method each preparation step is documented in real time, In the documentation screen (*Figure 6)*, the "report for the preparation" can be generated (*figure 7*), which includes the preparer and assistant check details, or a detailed "preparation log" *(figure 8)* which outlines every step of the preparation.

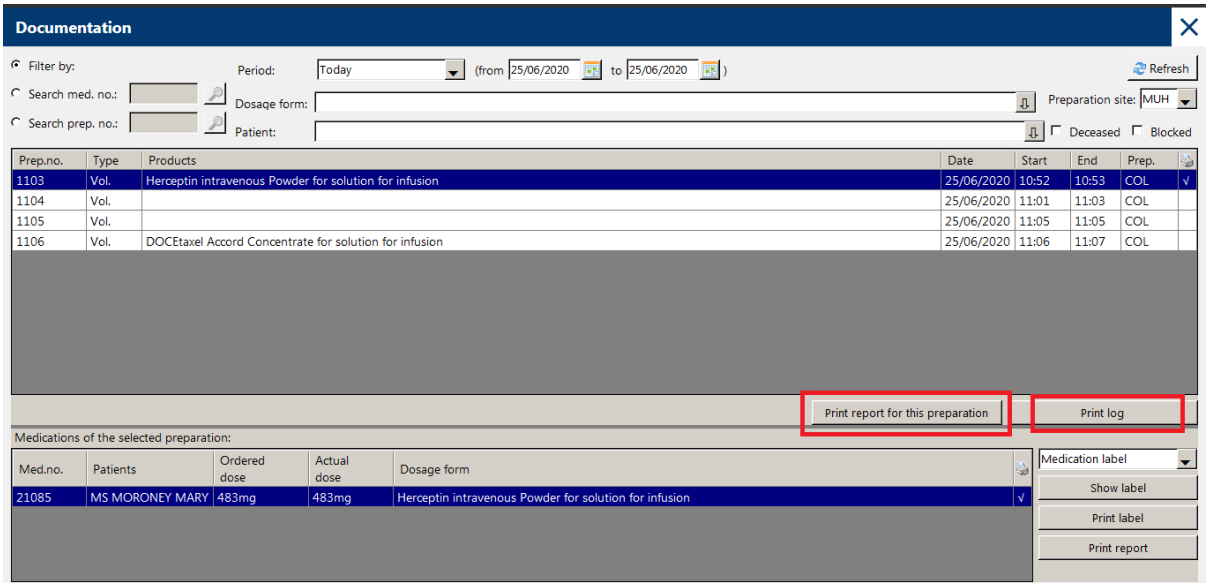


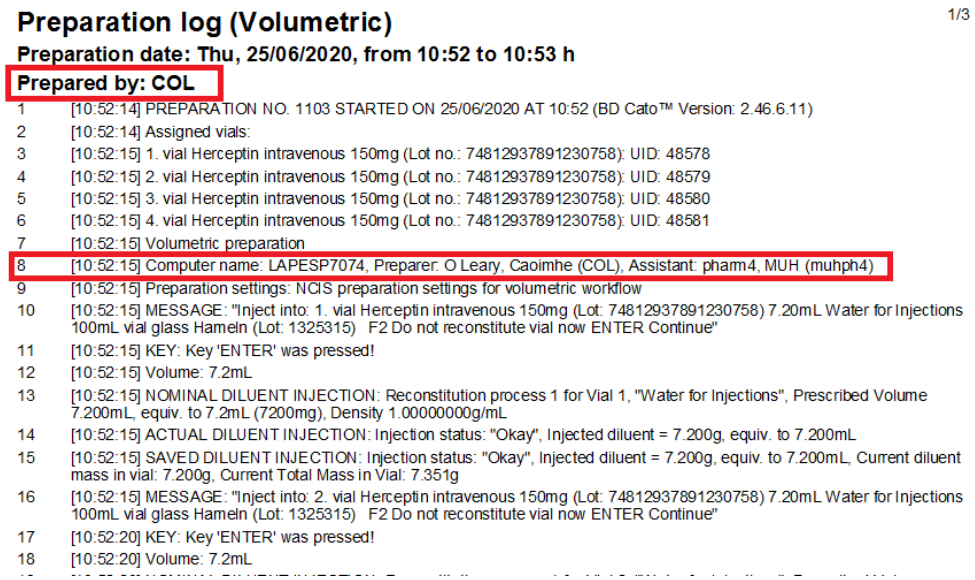
Figure 6: Documentation screen

Active ingredient quantities

Volume	Active ingredient quantity	Time	Prep. (asst.)	Vial's UID	UID
1.4mL	29.4mg	25/06/2020 10:53	COL (muhph4)	48578, 48579, 48580, 48581	692
21.6mL	453.6mg	25/06/2020 10:53	COL (muhph4)		693

Product	Nominal active	Actual active	Deviation

Figure 7: Extract from preparation report



Preparation log (Volumetric) 1/3

Preparation date: Thu, 25/06/2020, from 10:52 to 10:53 h

Prepared by: COL

1	[10:52:14] PREPARATION NO. 1103 STARTED ON 25/06/2020 AT 10:52 (BD Cato™ Version: 2.46.6.11)
2	[10:52:14] Assigned vials:
3	[10:52:15] 1. vial Herceptin intravenous 150mg (Lot no.: 7481293789123O758): UID: 48578
4	[10:52:15] 2. vial Herceptin intravenous 150mg (Lot no.: 7481293789123O758): UID: 48579
5	[10:52:15] 3. vial Herceptin intravenous 150mg (Lot no.: 7481293789123O758): UID: 48580
6	[10:52:15] 4. vial Herceptin intravenous 150mg (Lot no.: 7481293789123O758): UID: 48581
7	[10:52:15] Volumetric preparation
8	[10:52:15] Computer name: LAPESP7074, Preparer: O Leary, Caoimhe (COL), Assistant: pharm4, MUH (muhph4)
9	[10:52:15] Preparation settings: NCIS preparation settings for volumetric workflow
10	[10:52:15] MESSAGE: "Inject into: 1. vial Herceptin intravenous 150mg (Lot: 7481293789123O758) 7.20mL Water for Injections 100mL vial glass Hameln (Lot: 1325315) F2 Do not reconstitute vial now ENTER Continue"
11	[10:52:15] KEY: Key 'ENTER' was pressed!
12	[10:52:15] Volume: 7.2mL
13	[10:52:15] NOMINAL DILUENT INJECTION: Reconstitution process 1 for Vial 1, "Water for Injections", Prescribed Volume 7.200mL, equiv. to 7.2mL (7200mg), Density 1.00000000g/mL
14	[10:52:15] ACTUAL DILUENT INJECTION: Injection status: "Okay", Injected diluent = 7.200g, equiv. to 7.200mL
15	[10:52:15] SAVED DILUENT INJECTION: Injection status: "Okay", Injected diluent = 7.200g, equiv. to 7.200mL, Current diluent mass in vial: 7.200g, Current Total Mass in Vial: 7.351g
16	[10:52:15] MESSAGE: "Inject into: 2. vial Herceptin intravenous 150mg (Lot: 7481293789123O758) 7.20mL Water for Injections 100mL vial glass Hameln (Lot: 1325315) F2 Do not reconstitute vial now ENTER Continue"
17	[10:52:20] KEY: Key 'ENTER' was pressed!
18	[10:52:20] Volume: 7.2mL

Figure 8: Extract from preparation log

3. Non-Guided Preparation

It is also possible to use a more manual process where preparation is confirmed without utilising the guided preparation pathway.

1. When it comes to the "confirm preparation" functionality, there are a number of different options – the combination and method used is governed by local processes and workflows:
    a. For a more paper-based approach, print out the preparation instructions and/or the parts list, and use these as worksheets for the preparation
    b. It is also possible to print the med labels button to print in-isolator labels

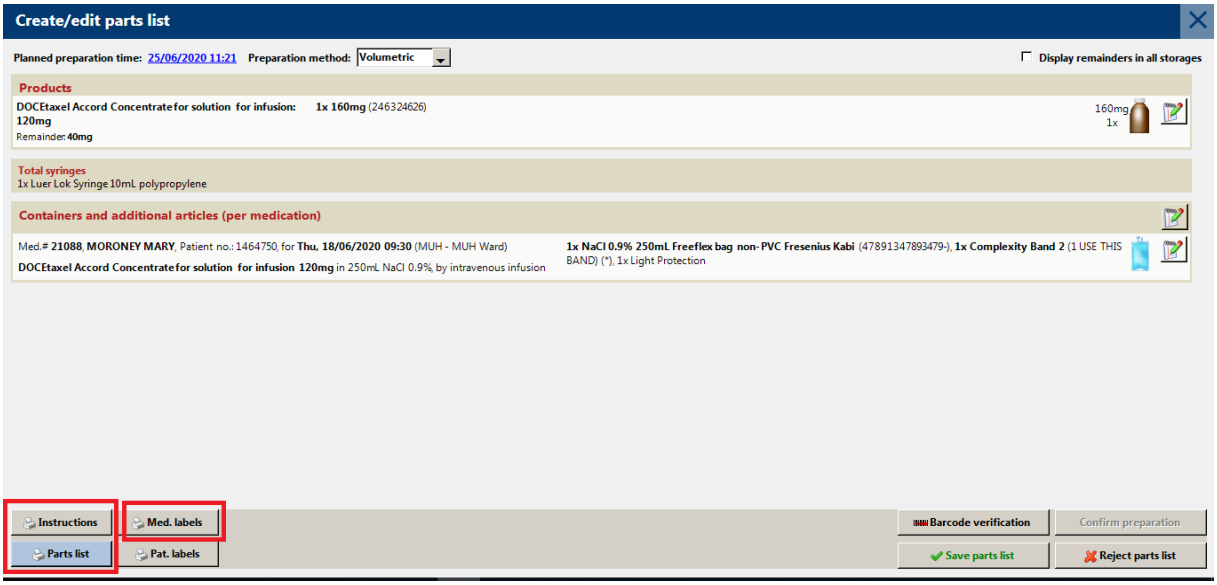
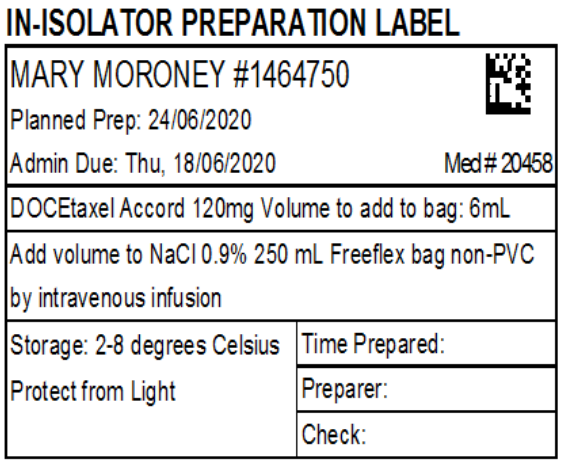


Figure 9: options for printing instructions, parts list, in-isolator labels

2. The in-isolator label has been configured to allow documentation of the preparation time, preparer and assistant details so that these can be recorded in NCIS after the preparation takes place. For example, if you don't have screens in the isolator and want the preparer/checked details captured in NCIS, these details can be added into NCIS after preparation has occurred.


IN-ISOLATOR PREPARATION LABEL

MARY MORONEY #1464750
Planned Prep: 24/06/2020
Admin Due: Thu, 18/06/2020 Med# 20458

DOCEtaxel Accord 120mg Volume to add to bag: 6mL

Add volume to NaCl 0.9% 250 mL Freeflex bag non-PVC by intravenous infusion

Storage: 2-8 degrees Celsius Protect from Light	Time Prepared: Preparer: Check:

Figure 10: in-isolator label

3. Every time the parts list is opened the planned preparation time will automatically default to the current date and time to ensure a more accurate expiry. It is possible to change this by clicking on the blue time and date area as seen below.

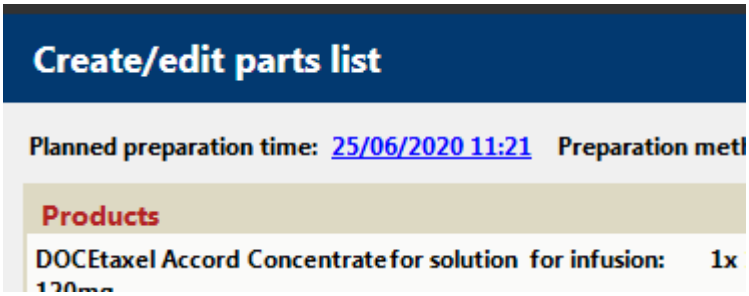


Figure 11: adjust the planned preparation time by clicking on the blue time and date

4. When clicking confirm preparation, the Preparer and the Assistant/checker is entered. Again, depending on local workflow, this could be the point where the volume checker's details are entered:

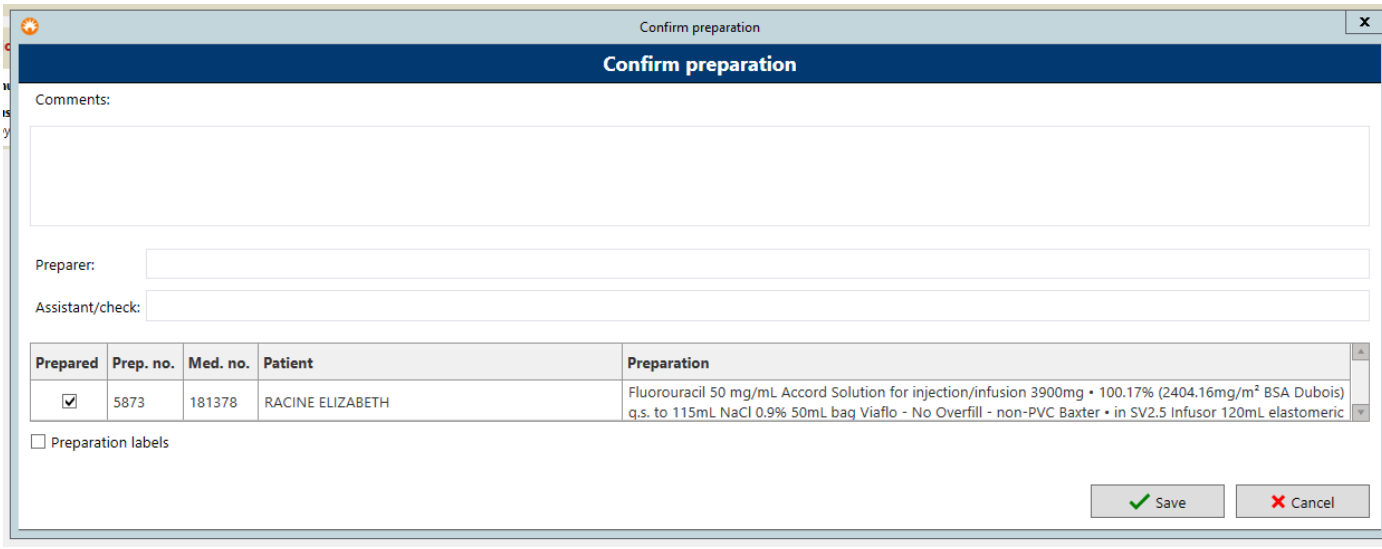


Figure 12: entering preparer and assistant details after clicking "confirm preparation"

5. In the documentation screen, as with guided preparation, it is possible to print a report for the preparation which will give the preparer and checker details. Since guided preparation was not used for this method, there will be no "print log" as the actual compounding took place outside NCIS:

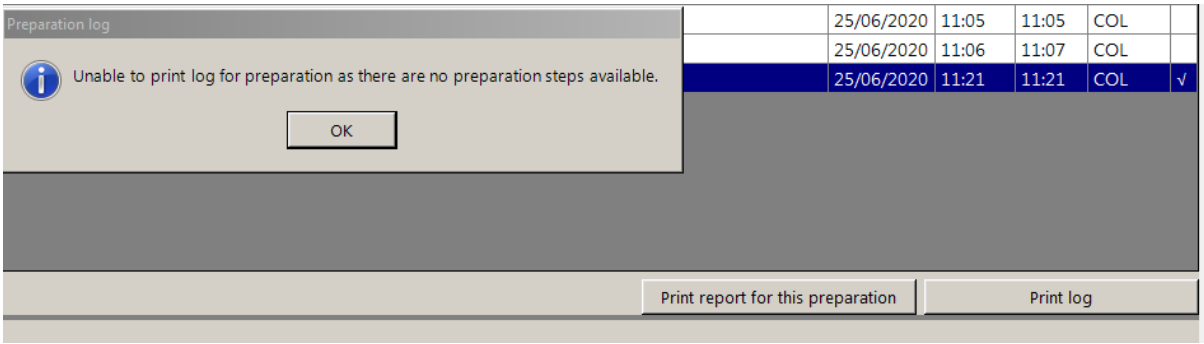


Figure 13: print log only available where guided preparation has been used, as this logs preparation steps in real-time