

NCIS – Creating a Case & Physician Management of Medications

This guide has been developed to assist you in managing medications in NCIS. It can also act as a training guide to introduce users to the use of the system, and to support familiarity with the system.

Electronic prescribing has been proven to enhance medication safety; however it may introduce new risks such as selection errors. This guide has been designed to outline the system functionality. We hope that you get the most out of this resource and that it aids you in your use of NCIS.

If you have any queries or suggestions for improvement, do not hesitate in contacting the NCIS office ncis@cancercontrol.ie

Important information relating to NCIS training

Please read the scenario in full, and any tips and warning points before attempting the tasks. Learning points are included to guide you through particular aspects of system functionality.

Important information about NCIS

NCIS users should use their clinical judgement when prescribing, validating, dispensing or administering patient treatments.

REMEMBER: Your electronic signature is considered equivalent to your written signature.

- Regimens built in NCIS are based on approved NCCP Chemotherapy Regimens. NCIS allows the modification of regimens at patient level. Use of NCIS regimens is the responsibility of the prescribing clinician.
- If there is a dose range in the regimen (for example Carboplatin AUC 3-6) the dose prescribed should be adjusted to the required dose.
- NCIS regimens have some Decision Support rules inbuilt, however it does not alert for all potential modifications.
- **Do not** assume that the absence of a decision support alert means that the dose is appropriate for that patient.
- The Drug File in NCIS is built based on information provided by manufacturers, regulatory bodies and research on drug stability. NCIS assigned drug stability can be adjusted locally.
- A number of laboratory results may be displayed in NCIS and may also be used in dose and decision support calculations. Laboratory results should continue to be reviewed outside NCIS as per the local hospital policy.

Commencing a Patient on Treatment

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KEY



Warning point



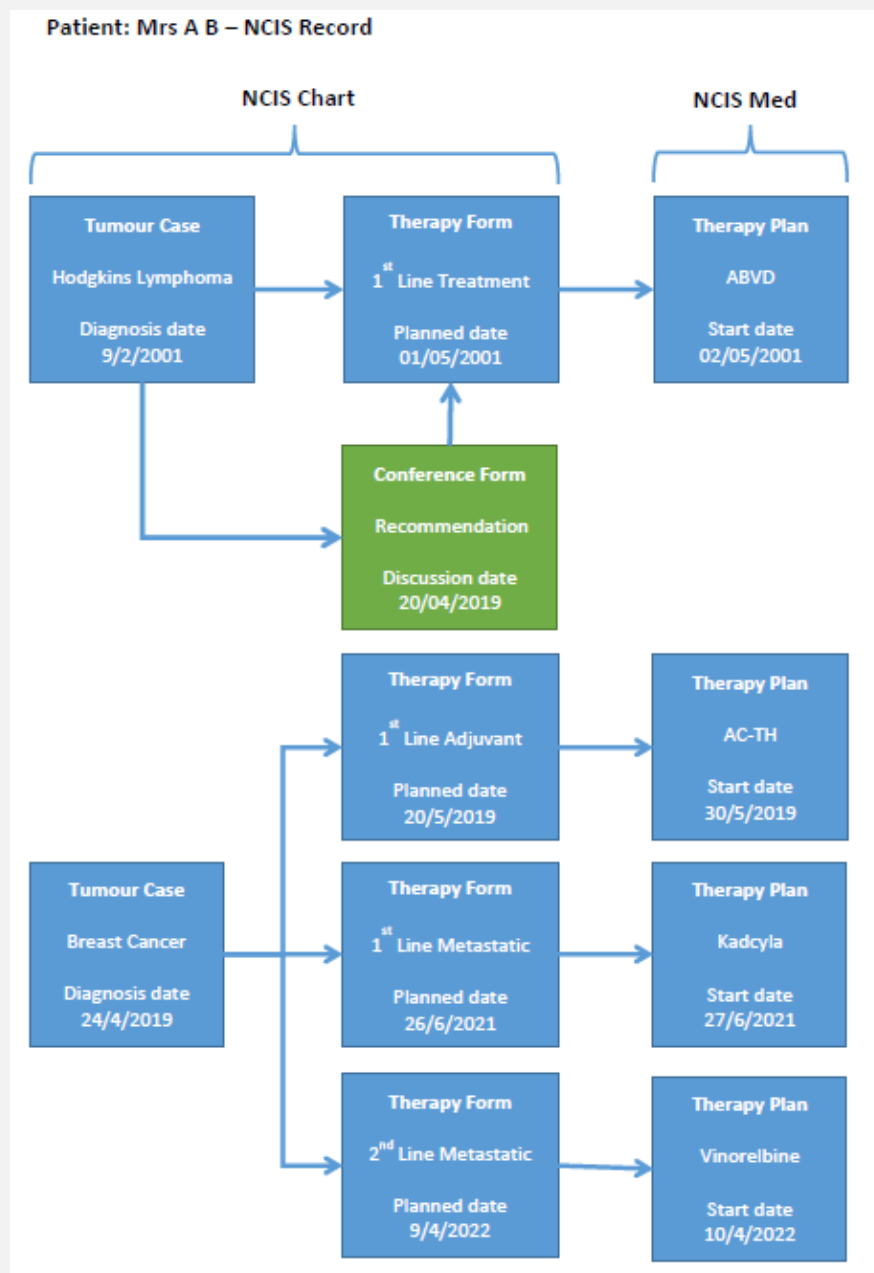
Tips



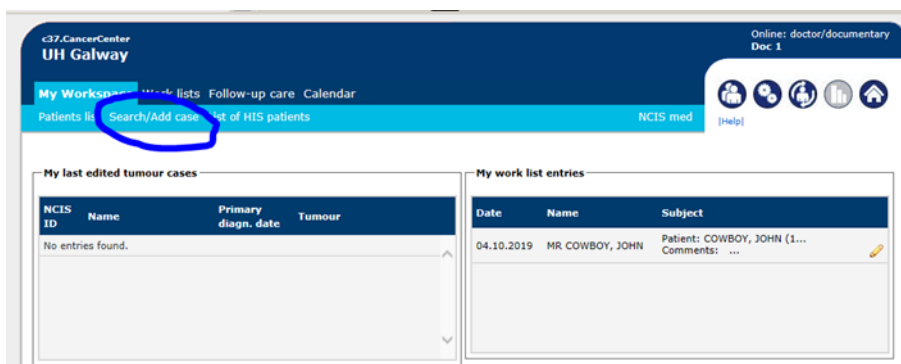
Learning point

Creating a Tumour Case in NCIS.Chart

The Tumour Case is created in NCIS.Chart and is used for all information, progress and treatment associated with a single cancer over time in a patient's NCIS record. If the patient has another cancer a separate Tumour Case should be created. See below for an example of how an NCIS record is structured



In the My Workspace screen of NCIS.Chart click Search/Add case





Search for the patient. **Note:** this search will search return patients registered on the National NCIS-Master Patient Index (MPI). It will be possible for you to view all patients that have a PAS record in the hospital(s) to which you have permission to access. Given the large number of patients in the MPI it is recommended to search using Last Name, First Name and Date of Birth.

For users with access to multiple hospitals ensure to select the correct hospital when logging in

Search/Add patient

Please enter last name, first name or date of birth

Surname

First name

Date of Birth

Health insurance number

or use a Hospital ID

Hospital ID

The following patients were found

NCIS ID Hospital ID	Name	Date of birth gender	Address	Hospital
GM1234675 (GUH)	MRS FLUORINE, MARY	15.08.1976 (F)	TESTING NCIS SOFTWARE TESTING FUNCTIONALITY TEST DUBLIN ROAD DUBLIN	MPI

The search will return all patients in the MPI that match the search criteria entered.

- If the patient has no current Tumour Case the Hospital will be listed as MPI
- The Patient ID for the hospital to which you are signed into will be shown
- If the patient already has an existing Tumour Case, that tumour case will be displayed, the name of the hospital and an NCIS ID will be also be displayed
- The NCIS ID is a 11 digit number that is unique to each NCIS patient and is generated when a Tumour Case is first created



Click on the patient you wish to create a tumour case for. The following box will appear that gives the option of adding a date of initial diagnosis, the diagnosis and the hospital to which you wish to add the case. **For users with access to multiple hospitals ensure to select the correct hospital**

Note: It is not mandatory to add a diagnosis or date at this point, however to maximise the functionality available it is recommended to do so where possible. If not entered at this point it is recommended to enter the diagnosis in the Tumour Case as soon as it becomes available/agreed.

Click "New case"

Add a new Document

Surname **FLUORINE, MARY (15.08.1976)**

Date of initial diagnosis

Diagnosis

Hospital **UH Galway**



The following screen will now show. Information from the local PAS system will populate in this screen and should be confirmed before continuing. It is also possible at this point to add a photo of the patient by clicking the “Browse” button in the “Picture of the Patient” section. Once complete click “Save” at the bottom of the screen.

Personal information

Title	MRS	Postal address	TESTING NCIS SOFTWARE TESTING FUNCTIONALITY
Surname	FLUORINE x	Eircode	
First name	MARY	County	Galway City
Surname at birth		Telephone	091 47696
Date of Birth	15.08.1976	Telephone (business)	
Gender	female	Telephone (mobile)	0861247996
Marital status	married	E-mail address	
Ethnicity			

Health insurance

Individual Health Identifier ⓘ

Health insurance number

Insurance group

Picture of patient

Upload file



The patients new Tumour Case will now be visible.

c37.CancerCenter
UH Galway

Patient **MRS FLUORINE, MA...**
D.O.B. 15.08.1976 (43)
NCIS ID 12638000070
Hospital ID GM1234675 (GUH) ⓘ

General info Diagnostics Conference Assessment Therapy Communication

Personal info **Tumour case** Clinical history

Basic data

Referring physician

Primary consultant

Family doctor/Specialist

Comorbidities

Primary diagnosis

Primary diagn. date 01.04.2020

Primary diagnosis C20 Malignant neoplasm of rectum

☐ Suspicion of

Colorectal cancer

Tumour type

Localisation

Tumour biology

Diagnosis confirmation on

Note: There are multiple fields in the Tumour Case form, some specific to the diagnosis entered. No fields are mandatory but information entered here may be useful for MDMs and case reporting.



Changing the Diagnosis of A Tumour Case

Occasionally it may be necessary to change the diagnosis of a tumour case after it has been created. For example if further diagnostic information becomes available.

In this case we will change the diagnosis from Hodgkins Lymphoma to Non-Hodgkins Lymphoma, Click Edit on the tumour case window.

Click on the star beside Primary Diagnosis, search for and select the new diagnosis

A new drop down box will appear where you can select the reason for changing the diagnosis, select and click save on the tumour case form.

A new diagnostic history button will appear to indicate there has been a change to diagnosis. Clicking on this will show the changes to diagnosis in the tumour case

Diagnosis date	Diagnosis	Reason for change	edited on / by
22.08.2022	C85.9, Non-Hodgkin lymphoma, unspecified	01: New diagnostic information	29.08.2022 / Doc1, GC
22.08.2022	C81.9, Hodgkin lymphoma, unspecified		

Any therapy plans in the tumour case will show all the diagnoses that have been associated with the tumour case. If a therapy plan existed before the diagnosis was changed and if you wish to use the new diagnosis click “Transfer diagnosis and diagnosis date of the associated disease”.

To transfer the diagnosis to NCIS.Med click the in-context transition button

Diagnosis date	Diagnosis	Reason for change	edited on
22.08.2022	C85.9, Non-Hodgkin lymphoma, unspecified	01: New diagnostic information	29.08.2022
22.08.2022	C81.9, Hodgkin lymphoma, unspecified		

Entering Height and Weight in NCIS.Chart

The height and weight form in NCIS.Chart was developed specifically to allow a recorded double check of height and weight as well as for population of assessment forms and letters where applicable.

It is also possible to enter height and weight directly in NCIS.Med in the Medical Results tab. It is important to note that when signing a Height & Weight assessment form in NCIS.Chart the values will populate in NCIS.Med **however** when entering results in NCIS.Med they will not be sent to NCIS.Chart.

Each site should consider this functionality and decide where and when they wish to utilise the points of height and weight entry. For example a hospital may wish to use NCIS.Chart to gather a baseline height and weight in the out-patient clinic then use NCIS.Med only for ongoing recordings each cycle.



Click on the Assessment Tab, then Choose Height and weight from the Add drop down menu.

The screenshot shows the top navigation bar of the c37.CancerCenter UH Galway system. The 'Assessment' tab is highlighted. Below the tabs, the 'Add:' dropdown menu is open, displaying 'Height and weight' as the selected option. The 'Document upload' button is also visible.

Enter the patient's height, weight or both, change the drop down at the bottom of the page to signed, then click save.

Note:

- Height and weight do not need to be entered immediately however it is recommended to enter an initial height and weight before creating the patient's Therapy Form and Therapy Plan
- Further information may be entered in the height and weight form such as the user who checked and verified the height and weight. These fields are not mandatory and can be used if required by local processes.
- **It is essential to SIGN and SAVE the form to ensure the height and weight are populated in the Therapy Form and in NCIS.Med**

The screenshot shows the 'Height and weight' form. The 'Date' field is set to 02.04.2020. The 'Height' field is 150 cm and the 'Weight' field is 62 kg. The 'Status' dropdown menu at the bottom is set to 'signed'. The 'Save' and 'Back' buttons are visible.

Creating a Therapy Form in NCIS.Chart

Therapy Forms are created within a Tumour Case and each represents a line or type of SACT treatment. There may be multiple Therapy Forms within the same Tumour Case.



Click on the Therapy Tab and choose "Therapy (NCIS med)" from the Add drop down list.

The new Therapy Form appears:

- The height and weight and diagnosis have been populated from the Height and Weight Form and the Tumour Case respectively. Note: the height and weight value will always be the most recent value entered into a height and weight assessment form.
- The decision to treat date is automatically populated with the date of Therapy Form creation but this can be changed as appropriate
- The Ready to Treat Date will be automatically populated when the patient is planned for SACT in NCIS.Med

Fields highlighted yellow are recommended however are not mandatory to move forward with prescribing

Click the NCIS Med button to Transition to NCIS.Med and create a Therapy Plan



DECISION TO TREAT DATE: The date on which it was decided that the patient required a specific planned SACT treatment. This is the date that the consultation between the patient and the Medical Oncologist/Haematologist clinician took place and a planned SACT treatment was agreed and consented by the patient

READY TO TREAT DATE: The date on which it was agreed that the patient is deemed fit to receive a specific planned SACT Treatment. The date Ready to Treat must be specified by the treating Medical Oncologist/Haematologist

Creating a Therapy Plan in NCIS.Med from a Regimen

Each Therapy Form is linked with a Therapy Plan in NCIS.Med. The Therapy Plan is like the prescription for a given regimen or line of treatment and governs: prescribing, verification, preparation/dispensing and administration.

- Regimens are built in NCIS.Med on the basis of NCCP National Regimens
- Regimens act as order sets and are an efficient way to prescribe a protocol for a patient
- It is also possible to create a therapy plan from scratch, see next section, without using a regimen. Any medication available in the NCIS drug file can then be used for the patient, as and when required.



When you transition in patient context (as we did in the previous step) from the Therapy Form to the Therapy Plan in NCIS.Med the linkage will be established and information will move between them.

After clicking NCIS.Med in the patients Therapy Form the NCIS.Med application will launch in the patients record and the Add Therapy Plan window will appear.

To create a therapy plan from a regimen ensure “Create therapy plan from regimen” is ticked. This will be remembered for subsequent logins.

It is now possible to:

- Select a regimen for the patient from the NCIS Regimen Library (based on NCCP National Regimens)
- Filter available regimens by diagnosis by selecting the check box
- Complete the planned start date for treatment (this is the date that will populate the Ready to Treat Date in the Therapy Form)
- Complete the Place of Delivery (ward or day centre where treatment will be given) and Cost Centre (Primary Consultant)



It is strongly advised to complete the Place of Delivery and Cost Centre at this point, otherwise they must be completed cycle by cycle.



Once all fields are completed, click Save and the patient's Therapy will be planned. Click the Arrows on the brown cycle banner to view medications within each cycle.

Mrs. FLUORINE MARY • d.o.b. 15 Aug 1976 43.7 Years • Patient no. Uwe0204675 • GUH - GUH Ward

Today Therapies Compact Complete Patient data Medical results Diagnoses Cumul. doses

02 Apr - 28 May
Bleomycin, Etoposide and CISplatin (BEP) Version 1 - Therapy plan number: 515

Cycles: 3 • Days: 57

REIMBURSEMENT STATUS:
Not defined, the indication has yet to be assessed through the formal HSE reimbursement process.

02 Apr - 16 Apr
Cycle 1 Bleomycin, Etoposide and CISplatin 15 days

Distance: 21 days after Cycle 1 Bleomycin, Etoposide and CISplatin

23 Apr - 07 May
Cycle 2 Bleomycin, Etoposide and CISplatin 15 days

Distance: 21 days after Cycle 2 Bleomycin, Etoposide and CISplatin

14 May - 28 May
Cycle 3 Bleomycin, Etoposide and CISplatin 15 days

Take home prescriptions are to be handwritten as an interim measure until system development is complete

SUPPORTIVE CARE:
EMETOGENIC POTENTIAL:
Days 1-5 High
Days 8-15 Minimal (Refer to local policy).

PREMEDICATIONS:

Bleomycin, Etoposide and CISplatin (BEP)



Scroll to the cycle to see all the medications contained within the cycle. The current status of the medication is visible (green circle)

02 Apr - 16 Apr
Cycle 1 Bleomycin, Etoposide and CISplatin 15 days

Thu 02 Apr

08:00 30min
Administration
Bleomycin dosing may be referred to in IU or in mg. 1 000 IU = 1 mg
Bleomycin 30mg
in Bolus • by intravenous injection
Renal Impairment
If creatinine clearance > 50 ml/min bleomycin dose 100%
Administration
Hypotension following rapid IV administration has been reported.
Longer infusion times may be required based on the patient's tolerance
08:30 60min
Etoposide 167.83mg (100mg/m² BSA Dubois)
in 1000mL NaCl 0.9% • by intravenous infusion
Renal Impairment

PLANNED by TDO1 on 02 Apr

PLANNED by TDO1 on 02 Apr

Cycle 1 Bleomycin, Etoposide and CISplatin



Some regimens that do not have agreed standard supportive care contain Medication Selections. These should be defined or skipped when planning a therapy.

Click Define on the Medication Selection

17 Jun - 21 Jun
Cycle 1 R-CVP - 21 days (standard ritUXimab infusion rate) 5 days

Cycle postponement rules: If NEUT less than 1x10(9)/L, then postponement by 7 days • If PLT less than 75x10(9)/L, then postponement by 7 days

TODAY 17 Jun 11:30

Medication selection
Moderate risk of emesis-Select medication required

DEFINE

Choose the required Medication or Medications and click OK. It is also possible to Skip the Medication Selection by clicking Skip.

Define medication selection

Medication selection: **Moderate risk of emesis-Select medication required - Version 3**

Select all

- ☐ Aprepitant Capsule (Caps: 1 x 80mg) PO over 5 min
- ☐ Dexamethasone Tablet (Tabs: 4 x 2mg) PO over 5 min
- ☐ Dexamethasone Tablet (Tabs: 6 x 2mg) PO over 5 min
- ☒ Dexamethasone phosphate Solution for injection/infusion (Division: 1 x 8mg) by intravenous injection over 5 min
- ☐ Dexamethasone phosphate Solution for injection/infusion (Division: 1 x 8mg + 1 x 4mg) by intravenous injection over 5 min
- ☐ Granisetron Tablet (Tabs: 1 x 1mg) PO over 5 min
- ☐ Granisetron Tablet (Tabs: 1 x 2mg) PO over 5 min
- ☐ LORazepam Tablet (Tabs: 1 x 1mg) PO over 5 min
- ☐ Ondansetron Tablet (Tabs: 1 x 8mg) PO over 5 min
- ☐ Ondansetron Tablet (Tabs: 2 x 8mg) PO over 5 min
- ☒ Ondansetron Solution for injection/infusion (Division: 1 x 8mg) by intravenous injection over 5 min
- ☐ Ondansetron Solution for injection/infusion (Division: 2 x 8mg) by intravenous infusion over 15 min

Skip OK Cancel

The chosen Medications will now appear in the cycle in the Planned Status

17 Jun - 21 Jun
Cycle 1 R-CVP - 21 days (standard ritUXimab infusion rate) 5 days

Cycle postponement rules: If NEUT less than 1x10(9)/L, then postponement by 7 days • If PLT less than 75x10(9)/L, then postponement by 7 days

TODAY 17 Jun 11:30

5min Dexamethasone Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection **PLANNED** by TDO1 on 17 Jun

5min Ondansetron Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection **PLANNED** by TDO1 on 17 Jun

30min Cyclophosphamide 1297.95mg (750mg/m² BSA Dubois) in 250mL NaCl 0.9% • by intravenous infusion **PLANNED** by TDO1 on 17 Jun



LINKING AN UNLINKED THERAPY PLAN

If a Therapy Plan is created in NCIS.Med out of patient context then the information from NCIS.Med will not flow back to NCIS.Chart.

If an unlinked Therapy Form exists for a patient the CATO button shown below will appear in the patients record in NCIS.Chart

St. James's c37.CancerCenter

Patient: MR ZZTREBIANI, JOEY
D.O.B.: 23.08.1990 (32)
NCIS ID: 12656000064
Hospital ID: 6008656 (SJH)

General info | Diagnostics | Conference | **Assessment** | Therapy | Communication

Personal info | Tumour case | Clinical history | **Cato** | Facility: [dropdown]

To Link the record click on the CATO button. Check the tick-box next to therapy you want to link and click import. **If the patient has more than one diagnosis and more than one tumour case ensure you are in the correct case before importing.**

Cato [X]

Date	Protocol	
22.08.2022	Dose Dense DOXOrubicin, Cyclophosphamide (AC 60/600) 14 day followed by PACLitaxel (175) 14 day (DD AC-T) - Version 3	<input type="checkbox"/>

[Cancel] [Import]

A new Therapy Form will be created in NCIS.Chart containing the imported Therapy Plan from NCIS.Med. To view the new therapy form click on the Therapy tab.

St. James's c37.CancerCenter

Patient: MR ZZTREBIANI, JOEY
D.O.B.: 23.08.1990 (32)
NCIS ID: 12656000064
Hospital ID: 6008656 (SJH)

General info | Diagnostics | Conference | Assessment | **Therapy** | Communication

Add: [Please choose] | Document upload | Results from Interface

FORM FILTER: [No filter]

Date	PDF	Name	Disease	Status	Event
22.08.2022		Therapy (NCIS med) Therapy Form Diagnosis: C40.0 01.03.2022	Tumour Case Diagnosis C40.0 01.03.2022		
Cycle 1 A: 22.08.2022 - 22.08.2022 Cyclophosphamide Cycle 2 A: 05.09.2022 - 05.09.2022 Cyclophosphamide Cycle 3 A: 19.09.2022 - 19.09.2022 Cyclophosphamide Cycle 4 A: 03.10.2022 - 03.10.2022 Cyclophosphamide Cycle 5 PACLitaxel: 16.10.2022 - 17.10.2022 Dexamethasone, PACLitaxel Cycle 6 PACLitaxel: 30.10.2022 - 31.10.2022 Dexamethasone, PACLitaxel Cycle 7 PACLitaxel: 13.11.2022 - 14.11.2022 Dexamethasone, PACLitaxel Cycle 8 PACLitaxel: 27.11.2022 - 28.11.2022 Dexamethasone, PACLitaxel Indiv. treatment protocol: Dose Dense DOXOrubicin, Cyclophosphamide (AC 60/600) 14 day followed by PACLitaxel (175) 14 day (DD AC-T) - Version 3, Cycles administered: 0					

Creating a Therapy Plan in NCIS.Med without a Regimen (from scratch)

It is possible to create a therapy plan from scratch without using a regimen. Any medication available in the NCIS drug file can then be used for the patient, as and when required.



After clicking NCIS.Med in the patients Therapy Form (see Creating a Case and Physician Management of a Medication) the NCIS.Med application will launch in the patients record and the Add Therapy Plan window will appear.

To create a regimen from scratch untick the box “Create therapy plan from regimen”

It is now possible to:

- Choose whether to start the regimen on “Day 1” or “Day 0” (default = day 1)
- Complete the Place of Delivery (ward or day centre where treatment will be given) and Cost Centre (Primary Consultant)



It is strongly advised to complete the Place of Delivery and Cost Centre at this point otherwise they must be completed cycle by cycle.



After clicking Save the insert cycle window appears

- Add a start date for the therapy
- It is possible to use a cycle from an existing regimen by clicking the “from regimen” button, or creating a cycle entirely from scratch
- Complete the Designation field. To ensure that cycle numbers appear in the cycle banner, add in the name of the cycle after “Cycle {z}” (as below) the “{rv}” text can be removed
- The cycle number field is not required



Click Save and the patient's Therapy will be planned. Note the therapy plan can not be named, but is given a number. Click the PLUS icon on the brown cycle banner to add medications to the cycle.

Medications and infusion solutions can then be added to the cycle as Planned or Physician Verified (depending on your permissions)

It is also possible to add Medication Selections and Appointments at this point



When clicking on add medication the "Insert a Medication" window opens. At a minimum the following information must be defined Active ingredient, dose, date of administration, administration route, duration

Click Save when complete. If not all required information is entered a warning box will appear



For Oral Medications the time can be entered as 5mins—this is to facilitate bed planning

The Due date can either be entered as the date the medication is due or the day of the cycle

Route of Administration will auto-populate if there is only one possible route

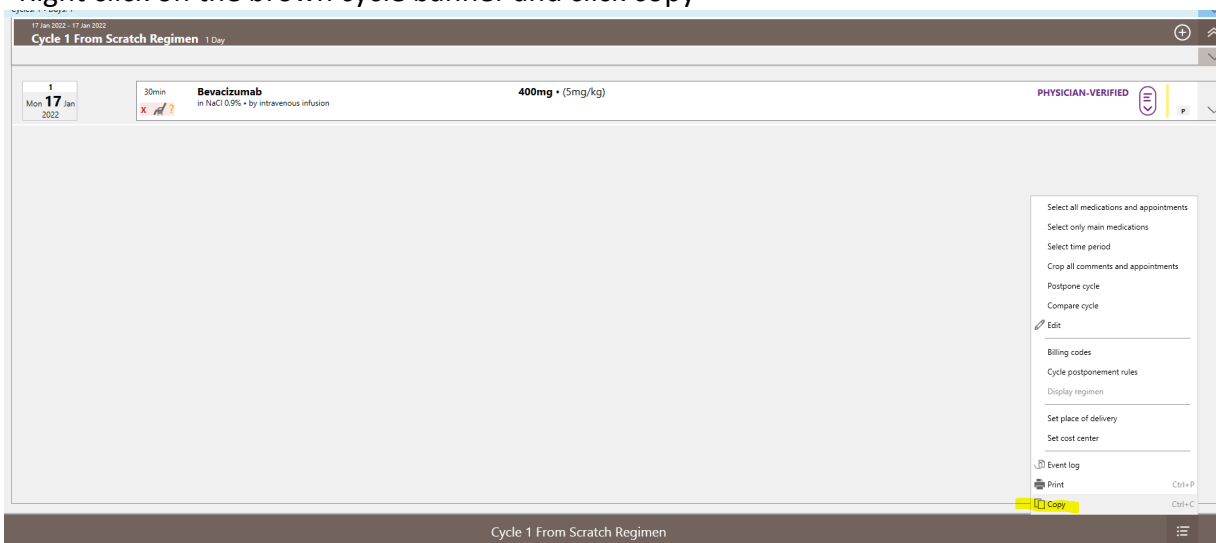


The new medication is now visible in the cycle



It is not possible to insert repeating cycles into a new therapy plan (the NCIS Office have requested this development from the Vendor). However it is possible to copy and paste existing cycles.

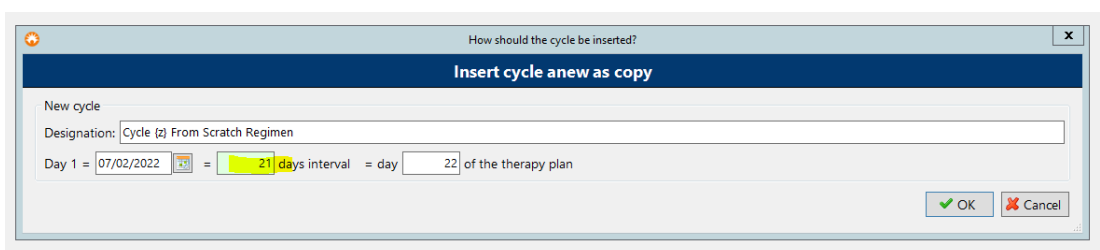
Right click on the brown cycle banner and click copy



Close the cycle by clicking the brown arrows on the cycle banner, right click and choose "Paste copied cycle"



The insert cycle anew as copy window appears. Select the date, therapy plan day, or interval to the cycle and click OK





The new cycle is now visible in the Therapy Plan

Cycles: 2 • Days: 22

17 Jan 2022 - 17 Jan 2022
Cycle 1 From Scratch Regimen 1 Day

Interval: 21 days after Cycle 1 From Scratch Regimen

07 Feb 2022 - 07 Feb 2022
Cycle 2 From Scratch Regimen 1 Day



To add additional cycles complete the same steps as above but right click on the last cycle when clicking paste

Interval: 21 days after Cycle 1 From Scratch Regimen

07 Feb 2022 - 07 Feb 2022
Cycle 2 From Scratch Regimen 1 Day

- Select all medications and appointments
- Select only main medications
- Select time period
- Postpone cycle
- Compare cycle
- Edit
- Billing codes
- Cycle postponement rules
- Display regimen
- Set place of delivery
- Set cost center
- Event log
- Print Ctrl+P
- Copy Ctrl+C
- Paste copied cycle Ctrl+V

Cycle 2 From Scratch Regimen

How should the cycle be inserted?

Insert cycle anew as copy

New cycle

Designation: Cycle 3 From Scratch Regimen

Day 1 = 28/02/2022 = 21 days interval = day 43 of the therapy plan

OK Cancel

17 Jan 2022 - 28 Feb 2022
Therapy plan number: 2548

Cycles: 3 • Days: 43

17 Jan 2022 - 17 Jan 2022
Cycle 1 From Scratch Regimen 1 Day

Interval: 21 days after Cycle 1 From Scratch Regimen

07 Feb 2022 - 07 Feb 2022
Cycle 2 From Scratch Regimen 1 Day

Interval: 21 days after Cycle 2 From Scratch Regimen

28 Feb 2022 - 28 Feb 2022
Cycle 3 From Scratch Regimen 1 Day

Physician Verifying Medications

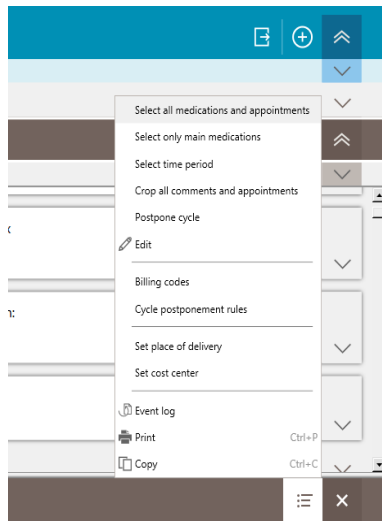
Physician verifying a medication is analogous to signing the medication, it needs to be completed for each medication in the cycle



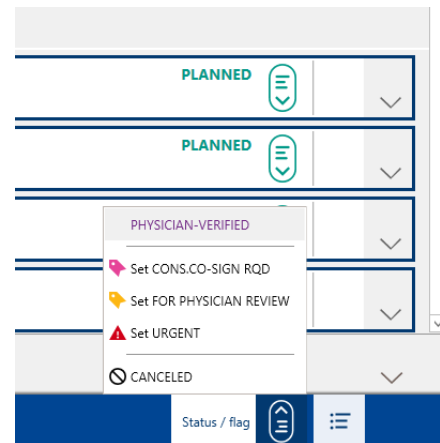
It is possible to select all medications in the cycle for verification , by either one of the two methods described below:

OPTION 1

Click on the Cycles context menu and
Click “select all medications and appointments”

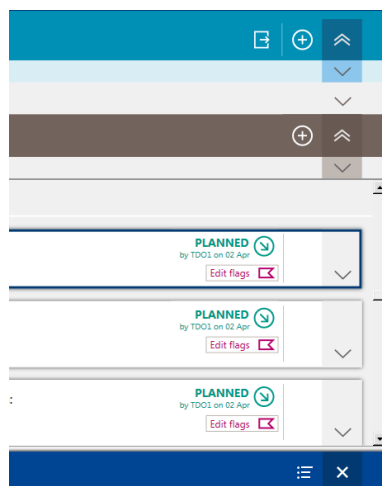


Click on “STATUS/FLAG”
Click “PHYSICIAN-VERIFIED”

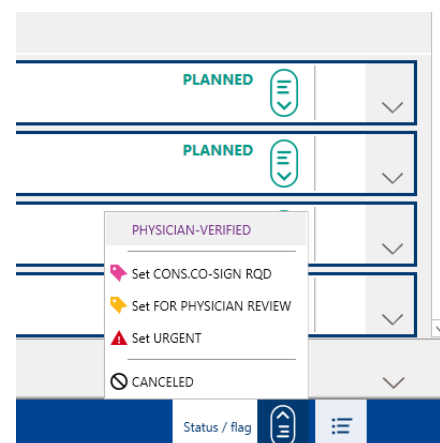


OPTION 2

Click on one medication in the cycle
Press “Ctrl + A” to select all medications in the cycle



Click on “STATUS/FLAG”
Click “PHYSICIAN-VERIFIED”



It is also possible to PHYSICIAN-VERIFY each medication individually if desired. Select the medication, click the Status/Flag icon and click PHYSICIAN-VERIFIED



Modifying the dose of a medication

Prescribers may change any aspect of a medication that is planned or physician verified. This section describes the Modify functionality which is the most efficient way to alter the dosage of a medication



Click on the Medication, then open the context menu for that medication and click modify



Click on the “Dose modification” check box and type in the % dose reduction or the Target Dose



For Cycle Postponement see the NCIS TRAINING GUIDE—MEDICATION POSTPONEMENT
For Changing Vehicle see below



If the Dose Modification is greater than 5% the Dosage Modification Wizard will ask if subsequent medications should also be changed. Click the appropriate button and click OK



The Medication (and subsequent medication if applicable) will now be dose reduced (the percentage shown is compared to the original planned dose)

Modifying the Vehicle of a medication

Prescribers may change any aspect of a medication that is planned or physician verified. This section describes the Modify functionality which is the most efficient way to alter the vehicle of a medication



Click on the Medication, then open the context menu for that medication and click modify



Click on the “Dose modification” check box and select the new vehicle or type the new vehicle volume



For Cycle Postponement see the NCIS TRAINING GUIDE—MEDICATION POSTPONEMENT
For Modifying Dose see above



The Medication will now have a new vehicle and/or volume



Changing Vehicle and/or Volume for multiple medications

It is possible to change the vehicle and/or volume for multiple medications within the same cycle by selecting more than one medication (click multiple medications while holding down the “Ctrl” key), then clicking Modify in the Medication context Menu

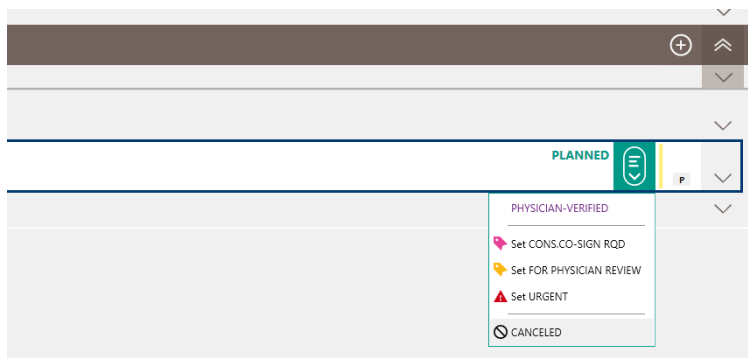
Medications are highlighted blue when they are selected

Cancelling a Medication

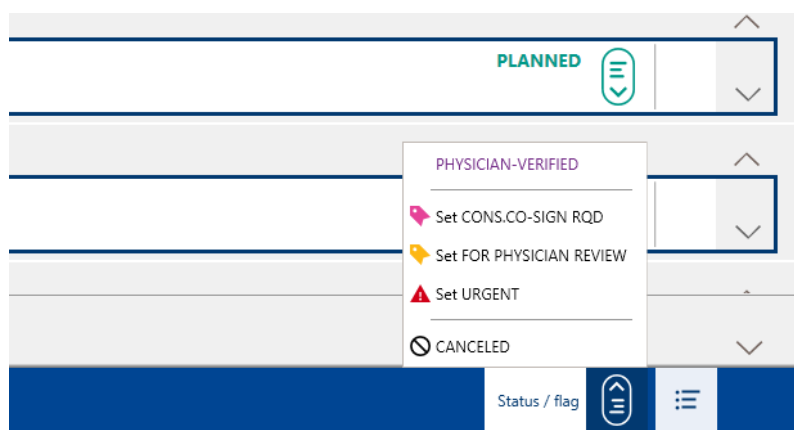
Medications cannot be deleted from a Therapy Plan, however they can be marked as cancelled with an associated reason code.



To cancel a single Medication Click on the Medication, click on the Status/Flag icon and click CANCELLED



To cancel multiple Medications, select the Medications, click on Status/Flags icon in the blue banner and click CANCELLED



Enter a reason for cancelling the medication(s) either by clicking the checkbox or clicking "Other—please outline below" and free typing the reason



You will now be asked if you wish to cancel just the current medication or all future medications with the same active ingredient and route of administration

Dosage Modification Wizard

Should subsequent medications with **CARBOplatin** and administration route by **intravenous infusion** be canceled as well?

☒ No

☐ Adjust all subsequent medications: 5 more



The medication(s) chosen will now appear with a CANCELLED flag and a strike through

60min **CARBOplatin** 7.5mg/mL/min AUC (GFR +25)

in 500mL Glucose 5% by intravenous infusion

PLANNED

Renal Impairment



Cancelling Cycles

It is not possible to cancel an entire cycle, all the medications in the cycle should be cancelled as described above. It is possible to change the title of the cycle to indicate to other users, at a glance, that the cycle has been cancelled.

Click on the brown cycle context menu and click Edit

16 Jun - 16 Jun

Cycle 1 CARBOplatin 1 Day

Cycle postponement rules: If NEUT less than 1x10⁹/L, then postponement by 7 days • If PLT less than 100x10⁹/L, then postponement by 7 days

TODAY 16 Jun

07:30 3min **CARBOplatin** 7.5mg/mL/min AUC (GFR +25)

in 500mL Glucose 5% by intravenous infusion

07:35 5min **CARBOplatin** 7.5mg/mL/min AUC (GFR +25)

in 500mL Glucose 5% by intravenous infusion

08:00 60min **CARBOplatin** 7.5mg/mL/min AUC (GFR +25)

in 500mL Glucose 5% by intravenous infusion

Renal Impairment

- Patients with creatinine clearance values of <60ml/min are at greater risk to develop myelosuppression.
- In case of GFR ≤ 20ml/min CARBOplatin should not be administered at all.
- If Cockcroft & Gault or Wright formula are used, the dose should be adjusted per cycle based on a:

Select only main medications

Select time period

Crop all comments and appointments

Postpone cycle

Edit

Billing codes

Cycle postponement rules

Set place of delivery

Set cost center

Event log

Print

Copy

Ctrl+P

Ctrl+C

Cycle 1 CARBOplatin

The name of the cycle can now be changed to include cancellation information if desired

Edit cycle

Designation:

Cycle no.:

[Cycle postponement rules](#) [Billing codes](#)

16 Jun - 16 Jun

Cycle 1 CARBOplatin - cycle cancelled 1 Day

Distance: 7 days after Cycle 1 CARBOplatin - cycle cancelled

23 Jun - 23 Jun

Cycle 2 CARBOplatin 1 Day

Adding a New Medication

Prescribers may add any medication to a cycle in a Therapy Plan, provided the medication is in the NCIS Drug File. Adding a medication as described in this section requires the prescriber to complete all the information manually. The next section describes Medication Selections which may be more expedient for common medications.

In the cycle you wish to add a medication to click on the PLUS icon on the cycle banner

The screenshot shows a cycle banner for 'Cycle 1 CARBOplatin 1 Day'. Below the banner, a list of medications is displayed with their times and doses. A dropdown menu is open, showing options: 'Planned medication', 'Physician-verified medication', 'Planned infusion solution', 'Physician-verified infusion solution', 'On-demand cycle', 'Medication selection', 'Appointment', 'Comment', and 'Cycle'. A green arrow points from the text above to the PLUS icon on the cycle banner.

The dropdown menu is shown in detail, listing the same options as the previous screenshot: 'Planned medication', 'Physician-verified medication', 'Planned infusion solution', and 'Physician-verified infusion solution'.

Medications or infusion solutions can be added in either the Planned or Physician Verified Status
Click whichever applies

The Insert Medication Window appears. At a minimum the following information must be defined Active ingredient, dose, date of administration, administration route, duration

The 'Insert planned medication' window is shown. It contains various fields for medication entry. Red circles highlight the following fields: 'Active ingredient' (with 'Aprepitant' entered), 'Usual dose' (with '125.00 mg' entered), 'Administration' (with 'PO' entered), and 'Duration' (with '5 min' entered). Other fields include 'Form', 'Container', 'Material', 'Vehicle', 'Date', 'Days in cycle', 'Place of delivery', 'Cost center', and 'Order no.'.

Click Save when complete. If not all required information is entered a warning box will appear



For Oral Medications the time can be entered as 5mins—this is to facilitate bed planning

The Due date can either be entered as the date the medication is due or the day of the cycle

Route of Administration will auto-populate if there is only one possible route



The new medication will now be entered in the cycle

11:00 60min **CARBOplatin** 7.5mg/mL/min AUC (GFR +25)
in 500mL Glucose 5% • by intravenous infusion PLANNED CANCELED

Renal Impairment
• Patients with creatinine clearance values of < 60mL/min are at greater risk to develop myelosuppression.

5min **Aprepitant** 125mg
PO PLANNED



It is not possible to add a medication to multiple cycles automatically—however it is possible to copy and paste a medication into cycles.

Click on the medication you wish to copy, open its context menu and click copy

5min **Aprepitant 125mg**
PO

- Set place of delivery
- Set cost center
- Set delivery time
- Event log
- Adjust subsequent medications
- Copy Ctrl+C

Selected medications: 1

It is then possible to move through cycles by clicking the large arrows at the top of the screen

NT MARY • d.o.b. 15 Aug 1976 43.8 Years • Patient no.: S12368 • GUH - GUH Ward

Today Therapies Compact Complete Patient data Medical results Diagnoses Cumul. doses

16 Jun - 21 Jul

CARBOplatin (AUC 2) Weekly with Radiotherapy (RT) Version 2 • Therapy plan number: 572

Once in the desired cycle click the Brown Cycle context menu and select Paste Copied Medicine

23 Jun - 23 Jun • Distance: 7 days after Cycle 1 CARBOplatin
Cycle 2 CARBOplatin 1 Day

Cycle postponement rules: IF NEUT less than 1x10(9)/L, then postponement by 7 days • If PLT less than 100x10(9)/L, then postponement by 7 days

Tue 23 Jun 07:35 5min Dexamethasone Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection

08:00 60min **CARBOplatin (2mg/mL/min AUC (GFR +25))** in 250mL Glucose 5% • by intravenous infusion

Renal Impairment
• Patients with creatinine clearance values of < 60mL/min are at greater risk to develop myelosuppression.

- Select time period
- Crop all comments and appointments
- Postpone cycle
- Edit
- Billing codes
- Cycle postponement rules
- Set place of delivery
- Set cost center
- Event log
- Print Ctrl+P
- Copy Ctrl+C
- Paste copied medication Ctrl+V

Cycle 2 CARBOplatin

Enter the day of the cycle or date for the copied medication and click save

Administration: PO Duration: 0 Days 0 h 5 min

Date Relative Date: 23/06/2020 Days in cycle: 1 e.g. 1-3,5,7-9,10,3 Time:

Place of delivery: SLH - SLH Ward Cost center: SLH - Dr. Austin Duffy Order no:

[Create preparation notes](#) [Create comments](#) [Insert rules](#) [Insert services / additional articles](#) [Bed planning](#)

Save Cancel

Adding a New Medication from a Medication Selection

Medication selections contain standard supportive medications with doses and administration details pre-populated. They can be added to any cycle in a Therapy Plan.



In the cycle you wish to add a medication selection to click on the PLUS icon on the cycle banner and click Medication selection

23 Jun - 23 Jun • Distance: 7 days after Cycle 1 CARBOplatin
Cycle 2 CARBOplatin 1 Day

Cycle postponement rules: If NEUT less than 1x10(9)/L, then postponement by 7 days • If PLT less than 100x10(9)/L, then postponement by 7 days

Time	Duration	Medication
Tue 23 Jun 07:35	5min	Dexamethasone Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection
08:00	60min	CARBOplatin (2mg/ml/min AUC (GFR + 25)) in 250mL Glucose 5% • by intravenous infusion

Renal Impairment
 • Patients with creatinine clearance values of <60ml/min are at greater risk to develop myelosuppression



Select the required medication selection, enter the date or day(s) it is due and click OK

Medication selection

Insert medication selection

Designation: [Dropdown]

Time: [Dropdown]

Date: [Dropdown]

High risk of emesis - Select medications required
 Low risk of emesis - Select medication required
 Moderate risk of emesis-Select medication required
 Supportive Medicines

OK Cancel



Click Define on the Medication Selection

Medication selection Supportive Medicines

DEFINE



Choose the medication or medications required and click OK

Define medication selection

Medication selection: **Supportive Medicines - Version 1**

Select all

☐ Chlorphenamine maleate Solution for injection (Division: 1 x 10mg) by intravenous injection over 5 min

☐ Hydrocortisone Powder for solution for injection/infusion (Division: 1 x 100mg) by intravenous injection over 5 min

☐ Mannitol 10% Solution for infusion (Division: 1 x 500mL) by intravenous infusion over 60 min

Skip

OK Cancel



The therapy plan now includes the chosen medications

23 Jun - 23 Jun • Distance: 7 days after Cycle 1 CARBOplatin

Cycle 2 CARBOplatin 1 Day

Cycle postponement rules: If NEUT less than $1 \times 10^9/L$, then postponement by 7 days • If PLT less than $100 \times 10^9/L$, then postponement by 7 days

Tue
23
Jun

High risk of emesis - Select medications required.

5min X	Chlorphenamine Solution for injection 10mg • Division: 1 x 10mg by intravenous injection
5min X	Hydrocortisone Powder for solution for injection/infusion 100mg • Division: 1 x 100mg by intravenous injection

If the medications are required in future cycles they can be copied and pasted as described above

Copying and Pasting a Cycle

It is possible to copy and paste an entire cycle. This may be useful when a change from the standard regimen is required for a patient. Rather than changing each cycle individually it is possible to schedule one cycle, make the changes then copy and paste the cycle.

This functionality is also useful for adding additional cycles to the patient's Therapy Plan



In the cycle you wish to copy click on the brown cycle context menu and click Copy

The screenshot shows the 'Cycle 6 CARBOplatin 1 Day' window. The cycle is scheduled for Tuesday, July 21st. The treatment includes Ondansetron, Dexamethasone, and CARBOplatin. A context menu is open on the right side of the window, with the 'Copy' option highlighted. Other options in the menu include 'Select only main medications', 'Select time period', 'Crop all comments and appointments', 'Postpone cycle', 'Edit', 'Billing codes', 'Cycle postponement rules', 'Set place of delivery', 'Set cost center', 'Event log', 'Print', and 'Copy' (with a keyboard shortcut of Ctrl+C).



Click back into the cycle context window and click Paste copied cycle

The screenshot shows the same 'Cycle 6 CARBOplatin 1 Day' window. The context menu is open on the right side, and the 'Paste copied cycle' option is now highlighted. The keyboard shortcut for this option is Ctrl+V.



The Insert cycle anew as copy window appears. Enter the date you wish the new cycle to appear. It is also possible to enter the interval between the copied and the new cycle rather than the date.

The screenshot shows a dialog box titled 'How should the cycle be inserted?' with a sub-header 'Insert cycle anew as copy'. The dialog contains a text field for 'Designation:' with the value 'Cycle {z} CARBOplatin'. Below this, there is a section for 'Day 1' which shows a date '11/08/2020' followed by an equals sign, a text field with '21', followed by 'days interval', an equals sign, a text field with '57', and 'of the therapy plan'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.



The new cycle will now be available in the therapy plan. Further cycles can be pasted by clicking on the brown cycle context menu.

11 Aug - 11 Aug • Distance: 21 days after Cycle 6 CARBOplatin

Cycle 7 CARBOplatin 1 Day

Cycle postponement rules: If NEUT less than $1 \times 10^9/L$, then postponement by 7 days • If PLT less than $100 \times 10^9/L$, then postponement by 7 days

Date	Time	Duration	Medication	Status	Notes
Tue 11 Aug	07:30	5min	Ondansetron Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection	PLANNED by TDO1 on 17 Jun	
	07:35	5min	Dexamethasone Solution for injection/infusion 8mg • Division: 1 x 8mg by intravenous injection	PLANNED by TDO1 on 17 Jun	
	08:00	60min	CARBOplatin (2mg/ml/min AUC (GFR +25)) in 250mL Glucose 5% • by intravenous infusion	PLANNED by TDO1 on 17 Jun	
			Renal Impairment		

Cycle 7 CARBOplatin