
# Using Chemocare to aid with reporting and capacity planning

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# This presentation will cover…

1. **Chemoscheduling**
   * Chemodiary set up
   * Chair management
   * Interventions
   * Attendance details
2. **Reporting**
   * Capacity reporting
   * Patient level reporting
   * Performance measures
   * SACT and SUS data

# Chemocare scheduling – current network situation

Newcastle Trust - live since July 2017 Chemotherapy day unit treatments only, yet to introduce to Supportive Therapies unit

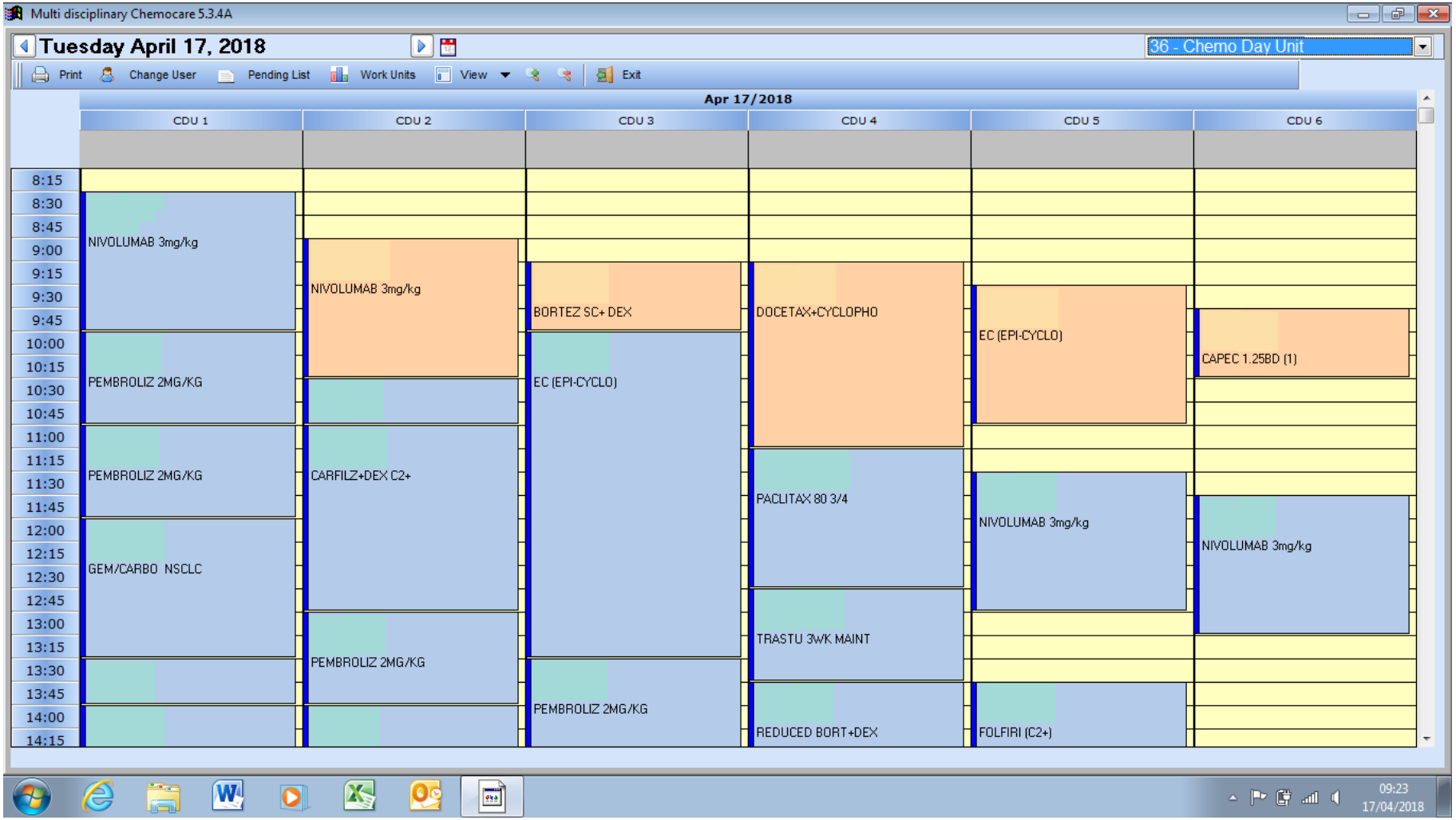
QE Gateshead – live since September 2017

Northumbria Trust – live since February 2018, all 4 day units

North Cumbria – Reiver House live since February 2018, Henderson Suite live since March 2018

South Tyneside – Yet to start using Chemocare scheduling

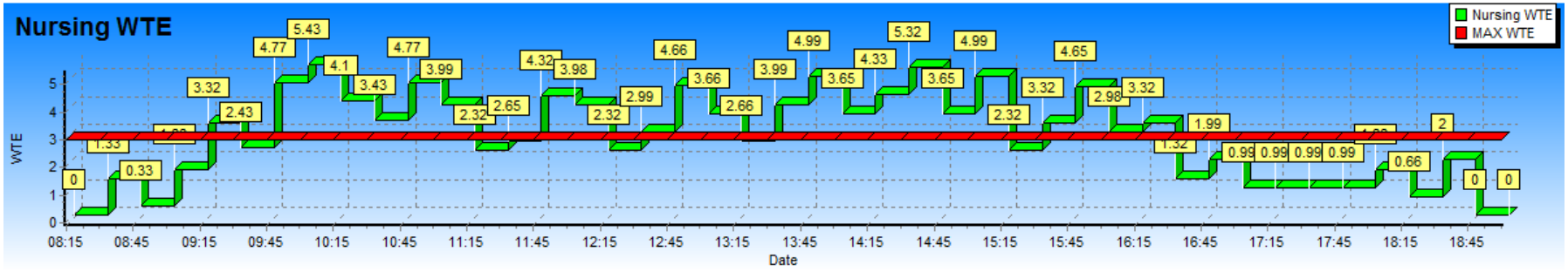
# Chemodiary example



# Chemodiary set up

**Diary has to be configured correctly!**

* When maximum capacity limit is reached, no further patients to be added.
* Configured on number of nurses allocated to the diary, rather than the number of available chairs on the unit. Unless the unit has enough nursing staff to accommodate all available unit chairs being occupied
* Chemodiary displays the Nursing working effort throughout the day
* CC allows further patients to be added to diary if there are still slots available



# Managing slots in the Chemodiary


* Chairs can be blocked in the Chemodiary for full days or for a specific time period
* Blocking chairs will stop any further patients being booked onto them

Example 1:
2 Chemo day unit nurses are on long term sick leave
Current nursing capacity wouldn't be able to accommodate a full Chemodiary
2 diary chairs are blocked for the next 4 weeks

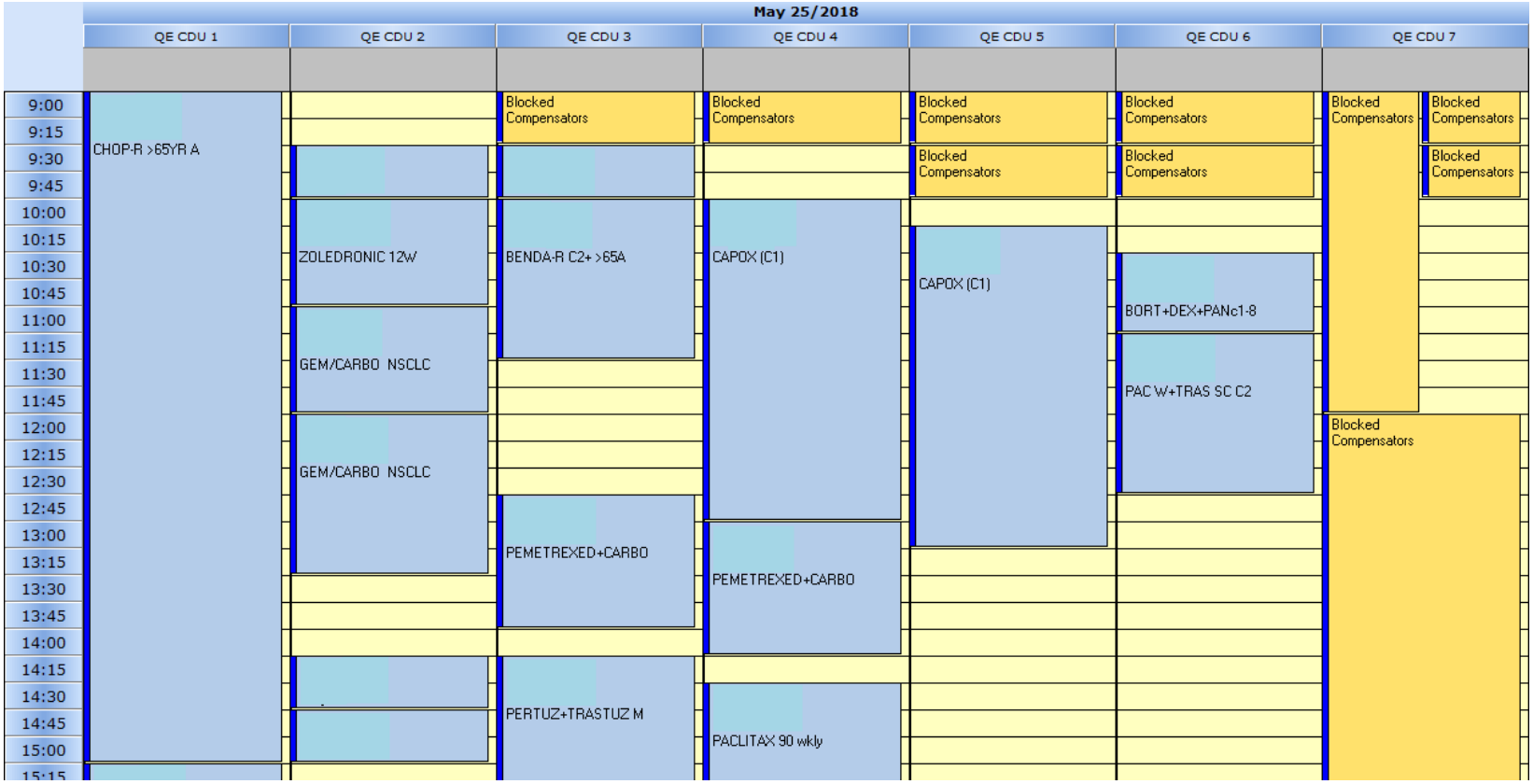
Example2:
CDU closed for full afternoon for training session
All diary chairs are blocked in the afternoon on that day

***Any patients already booked into those chairs would need to be manually moved to another chair or to an alternative day by the scheduling team***

# Blocking slots in the Chemodiary

Slot blockings can also be used to stagger patient arrival times to the unit i.e.
2 patients arriving at 9am, 2 patients arriving at 9:30am, 2 patients arriving at 10am

Blocking slots in the diary significantly slows down the appointment booking process for new patients!

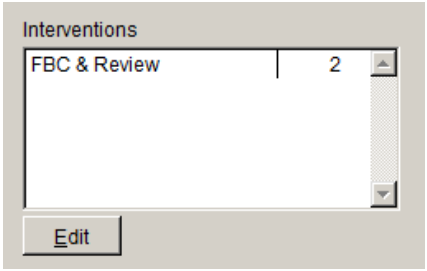


# Interventions

Interventions are clinical procedures in Chemocare

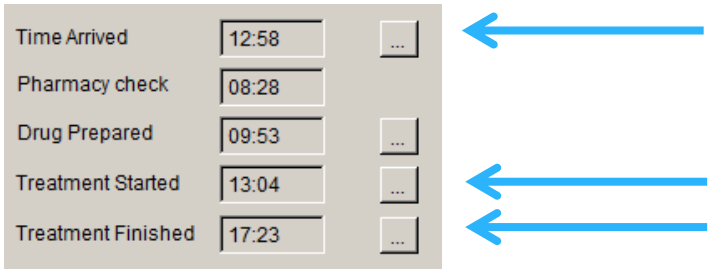
Examples include: Pre-assessments, pre-chemo bloods, line insertions, IVIG appointments and patient reviews

When attached to treatment appointments, this will increase the appointment time slot allocated to the patient in the Chemodiary.




Interventions can be added to the patients appointment on the day of treatment, allowing nurses to specify any additional procedures performed during the visit

# Recording patient appointment times




* Chemocare allows the recording of patient arrival time, and treatment start and finish times
* Allow the Chemocare team to run reports
* This will provide figures and percentages for:
  * appointments overrunning
  * patients not arriving to their appointments on time
  * Cycle resources configured correctly

**The more information recorded in Chemocare, the better!**

# Extracting reports from Chemocare

Our Chemocare network allows data extraction using :

* Crystal Reports
* SQL Server Reporting Services (SSRS)

Crystal Report Distributor (CRD) allows

* pre-defined reports to be automatically scheduled to run on a regular basis
* Reports are then emailed to users or saved into specific shared location

SSRS reports allow

* End users to select their own specific filters and parameters
* Instantly access the Chemocare database for results
* Save the report extract in a document type of their choice

crystal reports®

Microsoft® SQL Server®
Reporting Services

# Capacity related reports

**Chair Utilisation** - total hours of actual treatment given divided by the total available CDU capacity for a specific time period.

* As demand rises and chair utilisation increases, Trusts will be able to use these figures to forecast whether their service needs to be expanded i.e. more day unit chairs, or (even better) more nursing staff!
* **Percentages will never be 100%**
  * Staggered patient start times
  * Chemodiary end times being later in the day
  * Staff breaks.
* These figures can be monitored and used as a measure for capacity planning.

***Quality of data pulled from Chemocare relies on Chemodiary being an accurate representation of daily activity***

# Capacity related reports

**Patient waiting times on treatment day**

* Time from scheduled appointment to treatment commencement
* Relies on correct start time against patients treatment.
* Waiting time on the day of treatment can have a negative impact on the patient's overall experience of care.

**Access to first treatment**

* Time from decision to treat date to actual treatment commencement.
* Cancer waiting times submissions
* Monitoring trends in access data will provide an early warning of demand and capacity mismatch.

# Patient level reports

**Patients prescribed a particular drug or treatment**

* Great for identifying patients who require switching to another product or protocol i.e. biosimilar treatments

**Daily chemo day unit patient lists**

* Can be printed on a daily basis, stipulates all patients due in for treatment for that day.

## Chemocare Daily Treatment and Intervention

The Newcastle upon Tyne Hospitals NHS
NHS Foundation Trust

**50 distinct patients**

| Time | Diary | Patient ID | NHS | Name | Trt or Int | Course Name | Ward | Cycle | Day No | Consultant | Confirmed By | Pharm. Check |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08:30 | W36 | | | | Trt | NIVOLUMAB 3mg/kg | N36D | 5 | 1 | CRESTI DR N | DR NAJIBA MAHTAB | True |
| 09:00 | W36 | | | | Trt | NIVOLUMAB 3mg/kg | N36D | 39 | 1 | CRESTI DR N | DR CRESTI NICOLA | True |
| 09:00 | LD/C | | | | Trt | FOLFIRI+CET 2WK | N36D | 6 | 1 | AZZABI DR ASHRAF | DR ASHRAF AZZABI | True |
| 09:15 | W36 | | | | Trt | BORTEZ SC+ DEX | N36D | 1 | 1 | MENNE DR T | DR EMILY WATTS | True |

# Performance measuring reports

**Recording as given reports**

* All administered chemotherapy must be recorded as authorised and given
* Completes the treatment record
* Only then will the patient treatment data be sent in the Trust monthly SACT report
* Distributed to the CDU lead nurses at the end of every week and the start of every month

Example:

If a CDU is failing to record 20% of their SACT treatments as given, only 80% of their treatments administered will be submitted to PHE.

| Treatment | Cycle | Start Date | Status |
|---|---|---|---|
| **Other appointments** | | | |
| **Diagnosis: Carcinoma of Colon .... Protocol: FOLFIRI (Palliative)** | | | |
| FOLFIRI (C1) | 1 | 22/12/2017 | COMPLETED |

# SACT Dataset

* Systemic Anti-Cancer Therapy
* 43 dataset items – Trusts use Chemocare SACT report tool to generate report
* Ran on a monthly basis
* Normally 6 week window i.e. March 2018 SACT data will be ran at start of May 2018
* PHE produce Trust level reports detailing treatment activity, patient numbers per tumour group etc.
* Can easily compare one Trust to another
* Includes GMC No. of consultants
* 30 day mortality information
* IN THE PUBLIC DOMAIN – Can be accessed by anyone via the SACT website

# SACT Dataset – Medicines Optimisation CQUIN

Areas of improvement:

1. Report all treatment activity in the SACT dataset across all administration routes
2. Report complete high quality data in the SACT dataset for new Cancer Drugs Fund (CDF) treatments
3. Support improvements to outcomes data submission processes and improve data completeness.
4. Achieve high completeness and quality for the following key data items across all administration routes
   * Performance status, height and weight
5. Complete mapping of local to national treatment regimens within one month of upload and resolve queries within two months.
6. SACT data to be uploaded by the 15th of each month and approved by the end of each month

# SUS data

* Secondary Uses Service
* CDU Activity claimed by coding departments – Normally via a paper coding form completed by nurses for each patient on the day of treatment
* Trusts reimbursed procurement and delivery costs for administered treatment
* Figures compared against SACT data by PHE

| | | | TOTAL | | |
|---|---|---|---|---|---|
| Trust Code | NHS England commissioning hub | English NHS Hospital Trust | SACT | SUS | % Diff |
| RTD | North East | The Newcastle Upon Tyne Hospitals NHS Foundation Trust | 2,524 | 2,309 | 9% |

# Coding report from Chemocare

* Recently implemented at NUTH
* Allows coding team to pull all treatment **GIVEN** between a specific date range
* CDU Nurses (and Prescribers in O/P clinics) no longer need to complete paper coding forms, ***providing all treatment is recorded as given in Chemocare***
* Releases nursing and medic time to concentrate on patients, rather than paperwork
* Has resulted in:
  1. More drugs recorded as given in Chemocare
  2. Increase in SACT report data lines submitted to PHE
  3. Increase in activity claimed by Trust (to be audited after suitable period of time)
  4. Less % difference between SACT and SUS data (Hopefully)

01/03/2018 End date 31/03/2018 View Report

Day case, Inpatient, Outpatient Location NCCC 33 HAEM, NCCC 34, NCC

NULL NHS NULL

rtial) NULL

of 1 100% Find | Next

e only drug given

| CC Course | SACT REGIME SHORT NAME | PROC OPCS | DEL OPCS | Att Type | CYCLE | DAYNO | LOCNAME | DIAGNOSIS | Active Mapping |
|---|---|---|---|---|---|---|---|---|---|
| AZACITADINE | Azacitidine | X71.5 | X72.3 | D | 3 | 4 | NCCC 36 Day Unit | AML (Non M3) non intensive | 1 |
| CARBO 5+TOPO | Carboplatin + Topotecan | X71.1 | X72.1 | D | 7 | 2 | NCCC 36 Day Unit | Cervix- Squamous Carcinoma | 1 |
| AML(DA3+10) | DA 3 + 10 | X71.1 | X72.1 | I | 1 | 7 | NCCC 34 | Primary or secondary AML for intensive t | 1 |
| VEPEMB | VEPEMB | X70.2 | X72.3 | D | 10 | 15 | NCCC 36 Day Unit | Classical Hodgkin s Lymphoma | 1 |
| A11 B IND DEX 6 | ALL UKALL2011 IndB Std Dex (PegAsp) | X71.5 | X72.1 | I | 1 | 4 | NCCC 34 | Philadelphia negative B-ALL | 1 |
| NIVOLUMAB 3mg/kg | Nivolumab | X71.5 | X72.3 | D | 37 | 1 | NCCC 36 Day Unit | Malignant melanoma | 1 |
| TRASTUZ SC 3WKLY | Trastuzumab Subcutaneous | X71.3 | X72.3 | D | 13 | 1 | NCCC 36 Day Unit | Carcinoma of Breast | 1 |
| PEMETREXED+CISPL | Cisplatin + Pemetrexed | X71.5 | X72.1 | D | 2 | 1 | NCCC 36 Day Unit | NSCLC- Adenocarcinoma | 1 |
| CIS60 VIN60 | Cisplatin + Vinorelbine (PO) | X70.4 | X72.1 | D | 2 | 1 | NCCC 36 Day Unit | NSCLC- Adenosquamous | 1 |
| REDUCED BORT+DEX | Bortezomib (weekly) | X70.5 | X72.3 | D | 12 | 1 | NCCC 36 Day Unit | Myeloma | 1 |
| BENDA-R B | Bendamustine+Rituximab (1st Course) | X71.5 | X72.1 | D | 5 | 1 | NCCC 36 Day Unit | Lymphoplasmacytic lymphoma/ Waldenstroms | 1 |
| PEMBROLIZ 2MG/KG | Pembrolizumab | X71.5 | X72.3 | D | 21 | 1 | NCCC 36 Day Unit | NSCLC- Adenocarcinoma | 1 |
| AP | Cisplatin + Doxorubicin | X70.2 | X72.1 | I | 6 | 3 | NCCC 34 | Osteosarcoma bone (not limb) | 1 |
| AP | OST Euramos 1 Closed Trial - AP | X70.3 | N/A | I | 6 | 3 | NCCC 34 | Osteosarcoma bone (not limb) | 1 |
| PALBOCICLIB | Palbociclib | X71.5 | X73.1 | D | 11 | 1 | NCCC 36 Day Unit | Carcinoma of Breast | 1 |
| NIVOLUMAB 3mg/kg | Nivolumab | X71.5 | X72.3 | D | 11 | 1 | NCCC 36 Day Unit | Renal Cell carcinoma | 1 |
| MELPHALAN AUTO | Melphalan IV High dose | X70.2 | X72.1 | I | 1 | 0 | NCCC 33 HAEM | Myeloma | 1 |
| AZACITIDINE C1 | Azacitidine | X71.5 | X72.3 | D | 4 | 4 | NCCC 34 | AML (Non M3) non intensive | 1 |
| SORAFENIB 200MG | Sorafenib | X71.5 | X73.1 | D | 5 | 1 | NCCC 36 Day Unit | Hepatocellular Carcinoma | 1 |
| PEMBROLIZ 200MG | Pembrolizumab | X71.5 | X72.3 | D | 8 | 1 | NCCC 36 Day Unit | NSCLC- Squamous cell | 1 |
| PEMBROLIZ 2MG/KG | Pembrolizumab | X71.5 | X72.3 | D | 41 | 1 | NCCC 36 Day Unit | Malignant melanoma | 1 |

# Thank you for listening
# Any questions?

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