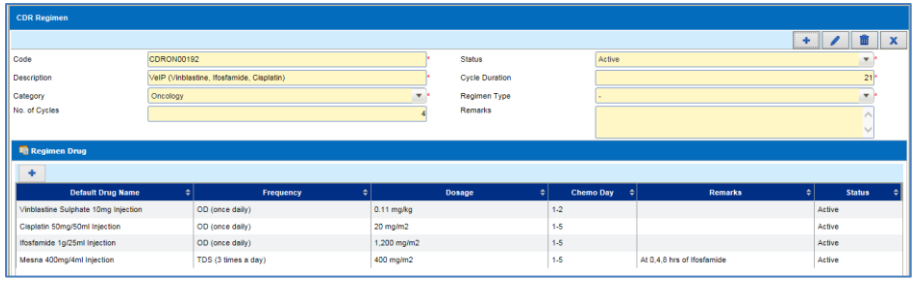
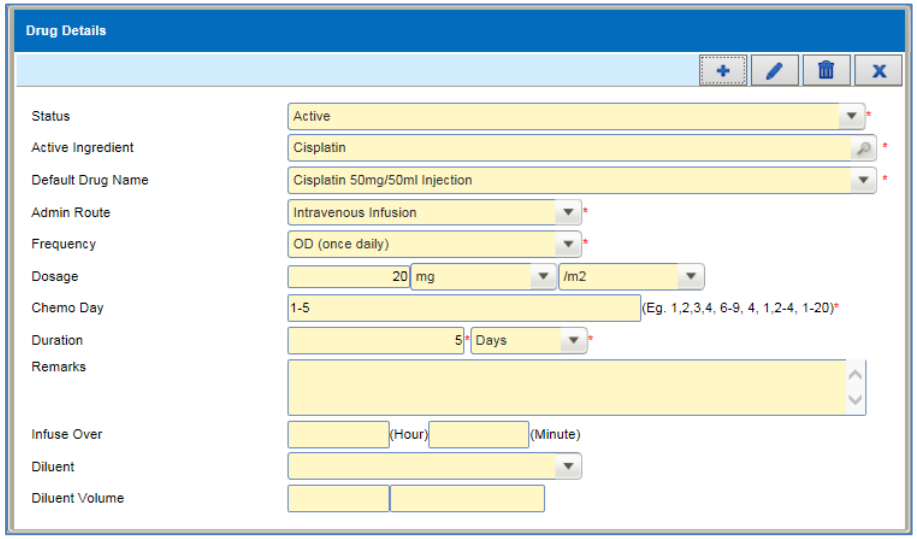
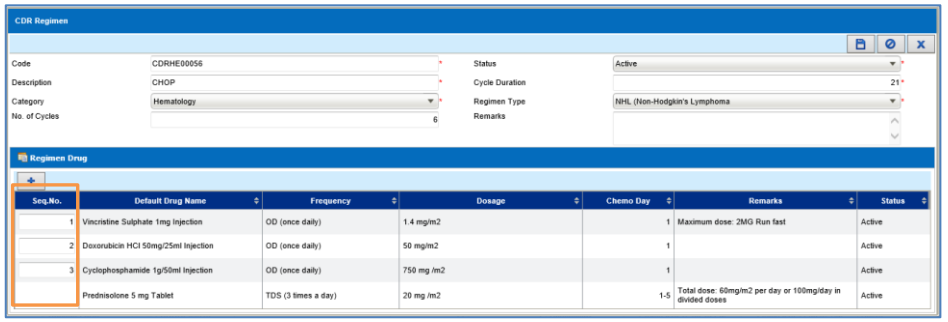
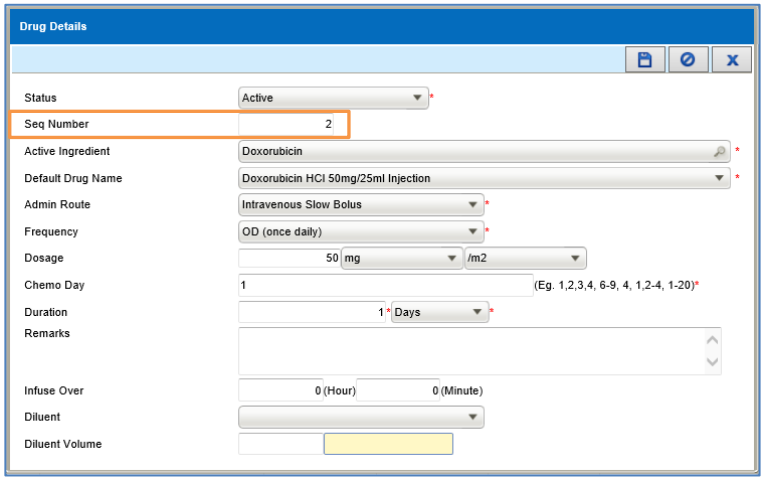
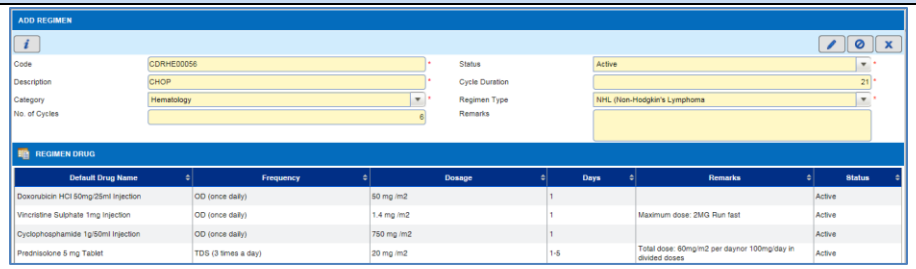
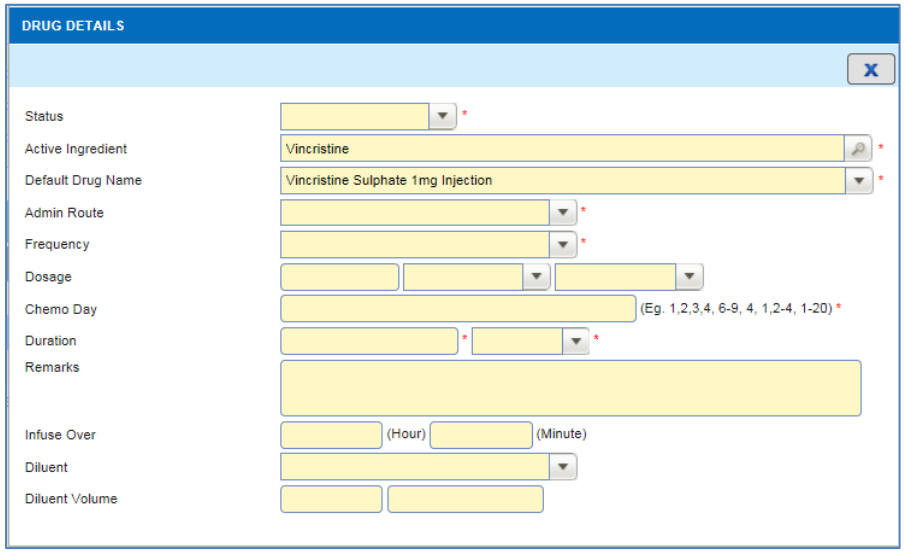
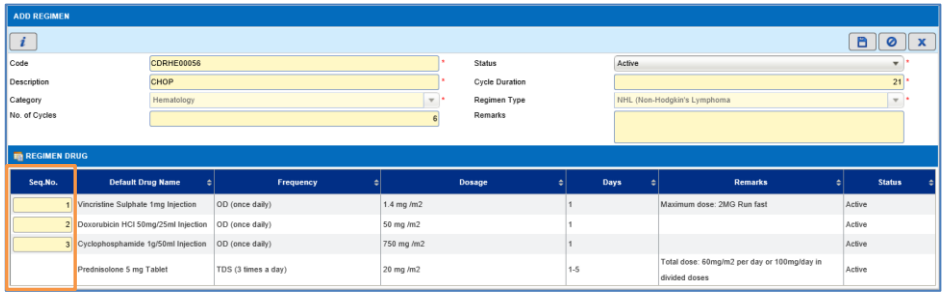
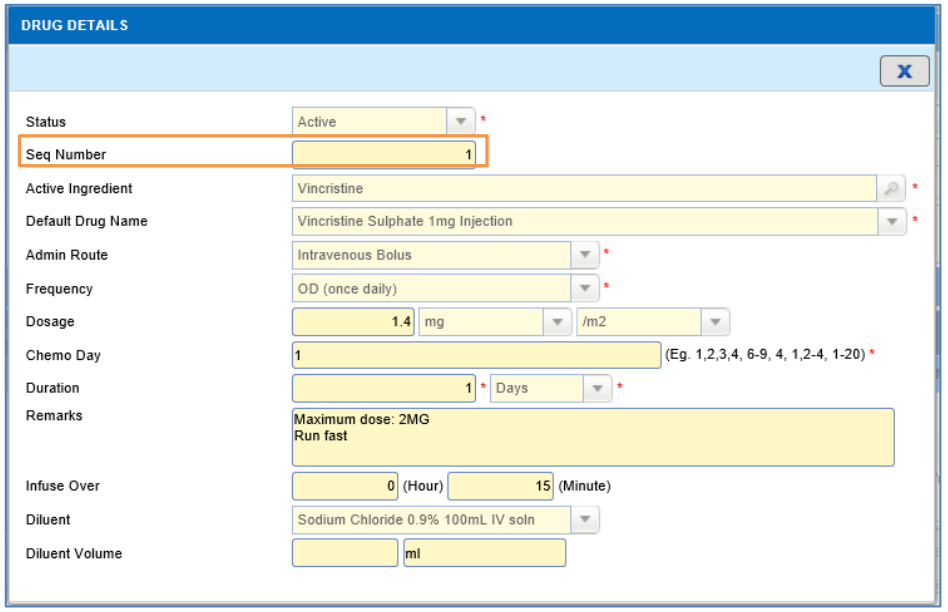
## Summary of Ticket Number and Requests for CDR Regimen

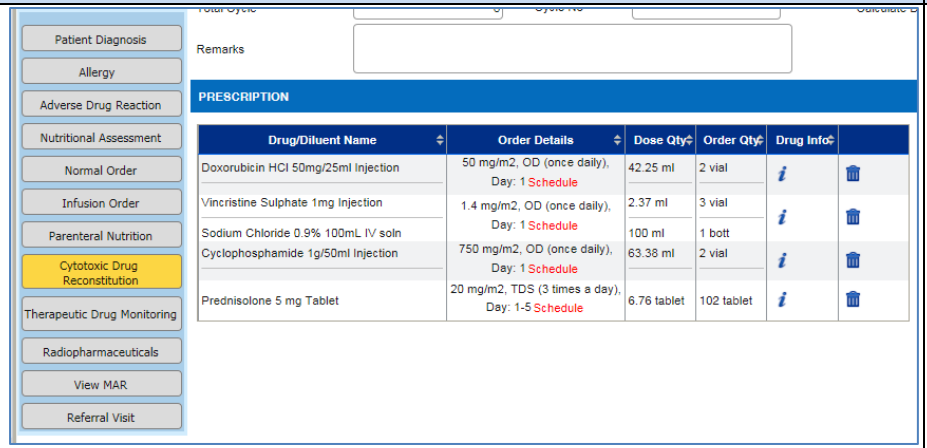
| No. | Ticket # | Description | Requests | Solution |
|---|---|---|---|---|
| 1. | I-PhIS011896315S | **Manufacturing - CDR - Request to add seq num to sort each drug details when adding new drug details**<br>In CDR Regimen, on adding new drug details to add sequence number to sort each drug details:<br>i. Similar with function in Formulation when adding new material, except that for CDR no need to automate the sequence, user will manually add/update the sequence.<br>ii. This sequence will then be displayed in order details and dispensing screen.<br>iii. Due to regimen with many administration and drugs as per example in attachment.<br>iv. To organize the display and reduce confusion for pharmacists.<br>Time: 3.15pm | Add sequence for each regimen drug | Add sequence number (manually user key in) for regimen drugs. Sequence will display accordingly in order and dispensing. |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| 1.Sequence number for regimen drug | 1. In IWP, by clicking on Maintenance → Pharmacy → CDR Regimen<br>2. Select regimen from CDR Regimen master listing<br>  <br>3. No column 'Seq. No.' in CDR Regimen screens.<br>4. Double click on regimen drug and Drug Details screen will show without field for 'Seq Number'.<br>  <br>5. In facility, by clicking on Maintenance → Pharmacy → CDR Regimen<br>6. Select regimen from CDR Regimen master listing<br>7. No column 'Seq. No.' added in CDR Regimen screen. | 1. In IWP, by clicking on Maintenance → Pharmacy → CDR Regimen<br>2. Select regimen from CDR Regimen master listing<br>  <br>3. New column 'Seq. No.' added in CDR Regimen screen. Allow to enter integer numbers on each regimen drugs.<br>4. Double click on regimen drug and Drug Details screen will show with new field for 'Seq Number'. Also allow user to manually enter the integer numbers.<br>***Note:*** Only infusion drugs (drug which have set IV drug is yes in Drug master) allow to set the sequence number.<br>  |

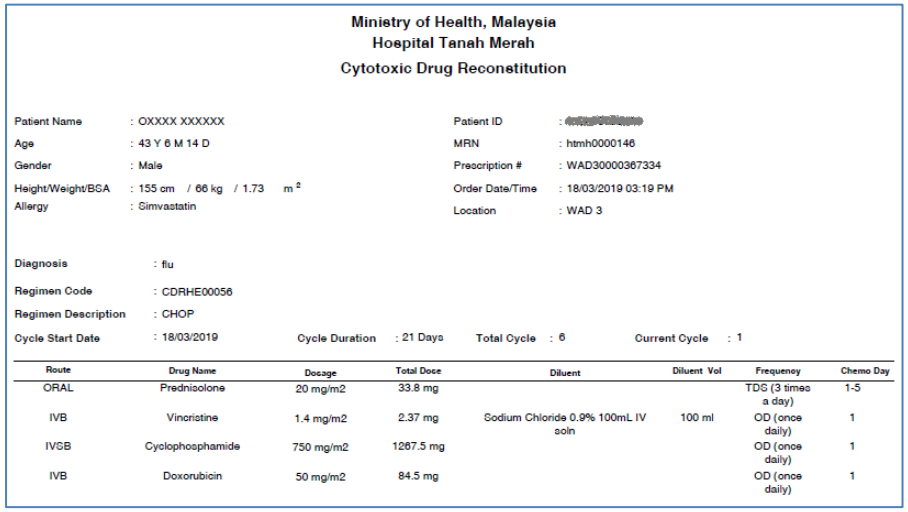
| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| |  <br>8. Double click on regimen drug and Drug Details screen will show without field for 'Seq Number'.<br>  <br>9. In Medication Order/Record Prescription, once Regimen selected, the drug listed without column 'Seq. No.' | 5. In facility, by clicking on Maintenance → Pharmacy → CDR Regimen<br>6. Select regimen from CDR Regimen master listing<br>7. New column 'Seq. No.' added in CDR Regimen screen. The value will be displayed as read-only as per value set in IWP.<br>  <br>8. Double click on regimen drug and Drug Details screen will show with new field for 'Seq Number'. The value will be displayed as read-only as per value set in IWP.<br>  |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

**Current Version 2.0**




10. In CDR Prescription, no column for sequence number



**Ministry of Health, Malaysia**
**Hospital Tanah Merah**
**Cytotoxic Drug Reconstitution**

| | | | |
|---|---|---|---|
| Patient Name | : OXXXX XXXXXX | Patient ID | : [redacted] |
| Age | : 43 Y 6 M 14 D | MRN | : htmh0000146 |
| Gender | : Male | Prescription # | : WAD30000367334 |
| Height/Weight/BSA | : 155 cm / 66 kg / 1.73 m² | Order Date/Time | : 18/03/2019 03:19 PM |
| Allergy | : Simvastatin | Location | : WAD 3 |

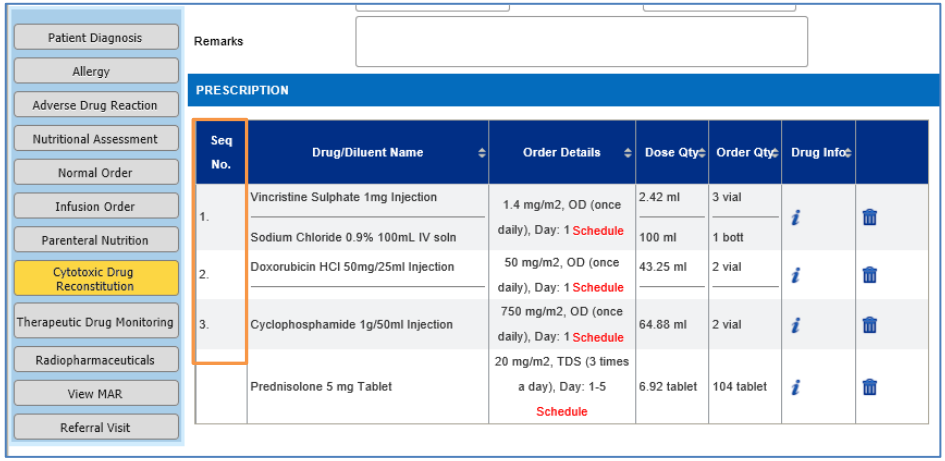
Diagnosis : flu
Regimen Code : CDRHE00056
Regimen Description : CHOP
Cycle Start Date : 18/03/2019 Cycle Duration : 21 Days Total Cycle : 6 Current Cycle : 1

| Route | Drug Name | Dosage | Total Dose | Diluent | Diluent Vol | Frequency | Chemo Day |
|---|---|---|---|---|---|---|---|
| ORAL | Prednisolone | 20 mg/m2 | 33.8 mg | | | TDS (3 times a day) | 1-5 |
| IVB | Vincristine | 1.4 mg/m2 | 2.37 mg | Sodium Chloride 0.9% 100mL IV soln | 100 ml | OD (once daily) | 1 |
| IVGB | Cyclophosphamide | 750 mg/m2 | 1267.5 mg | | | OD (once daily) | 1 |
| IVB | Doxorubicin | 50 mg/m2 | 84.5 mg | | | OD (once daily) | 1 |

11. In CDR Cycle History, no column for sequence number

**New Version 2.1**

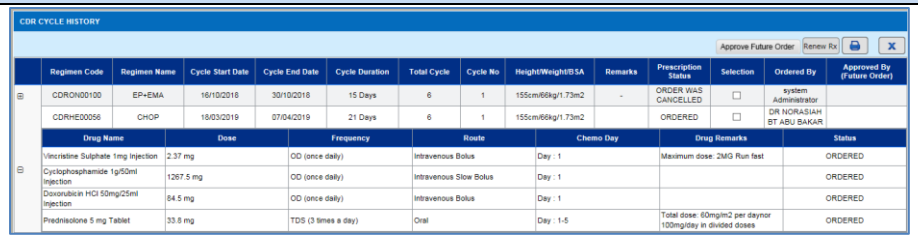
9. In Medication Order/Record Prescription, once Regimen selected, the drug list including new column 'Seq. No.' will be listed in the same sequence as sequence number set in IWP



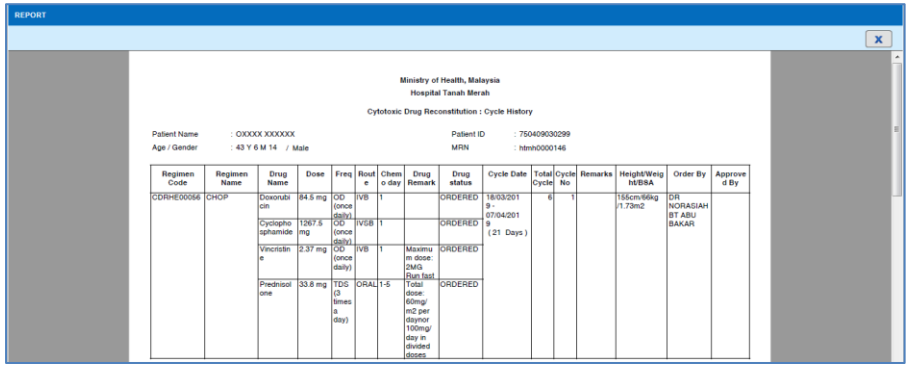

   i. Default sorting the drugs is in ascending order based on the sequence number
   ii. If no sequence number is set, default sorting will be in ascending by alphabet.
   iii. Within same regimen, the drugs don't have set sequence number will be sorted at the end of the list after drugs have set sequence number with ascending by alphabet.

10. In CDR Prescription, new column for sequence number will be displayed and the sorting drug will be sorted according to the sequence number

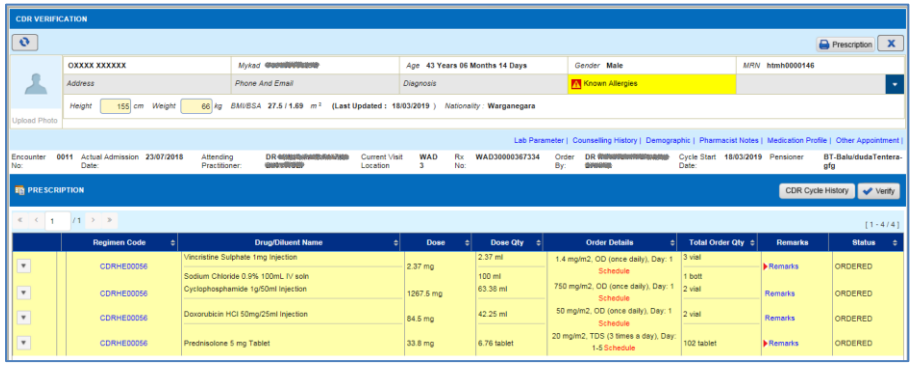
| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

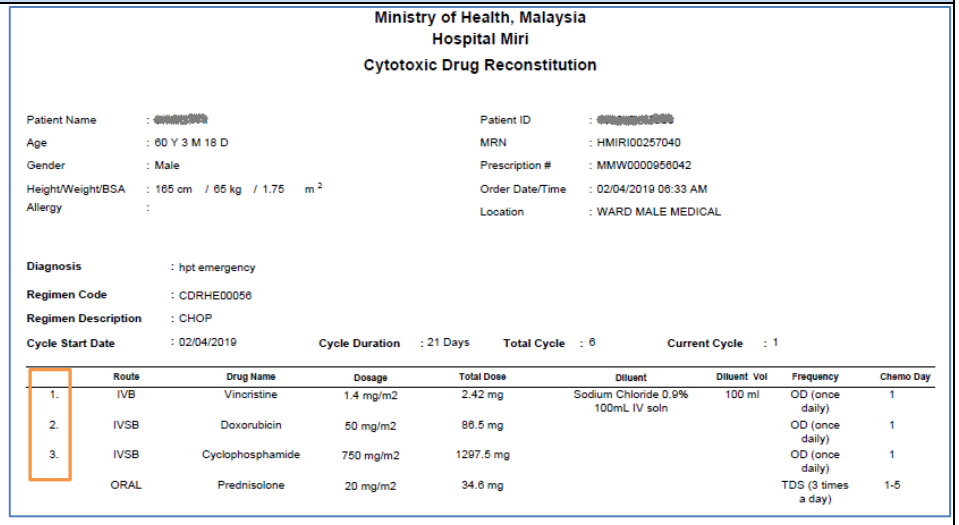



12. By clicking on print CDR Cycle History, CDR Cylce History in PDF will be displayed without the sorting of the drug list and no button 'Export to Excel'

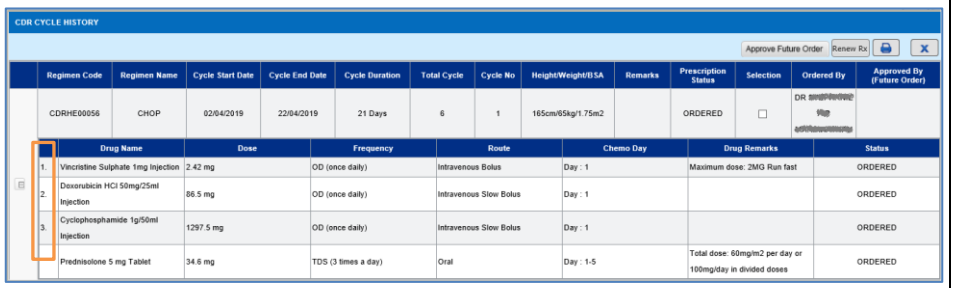



13. In CDR Verification, Preparation and Dispensing, no column for sequence number displayed, and the drug list not sorted.

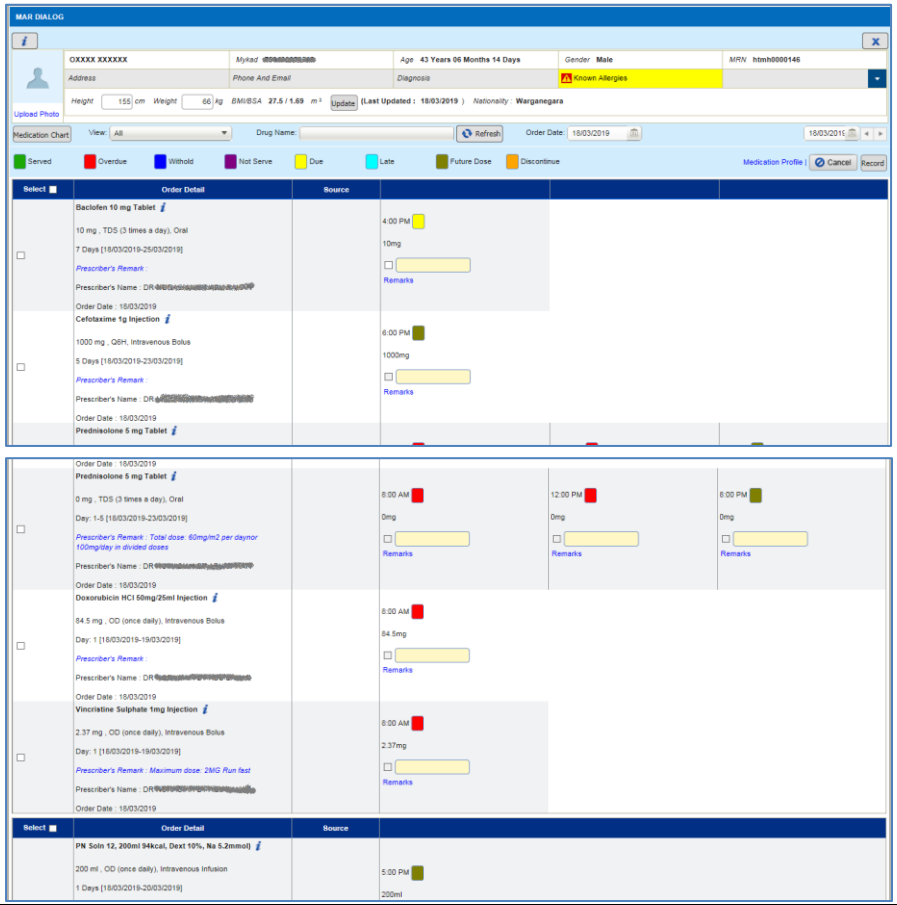
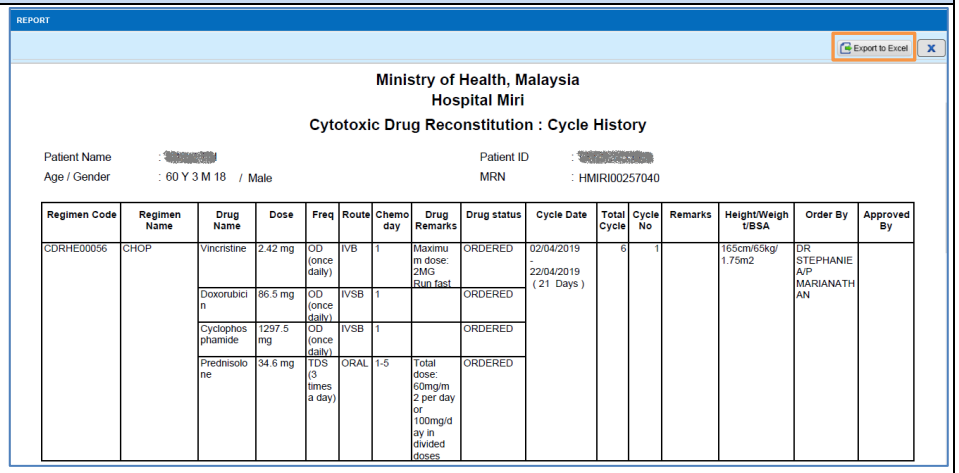
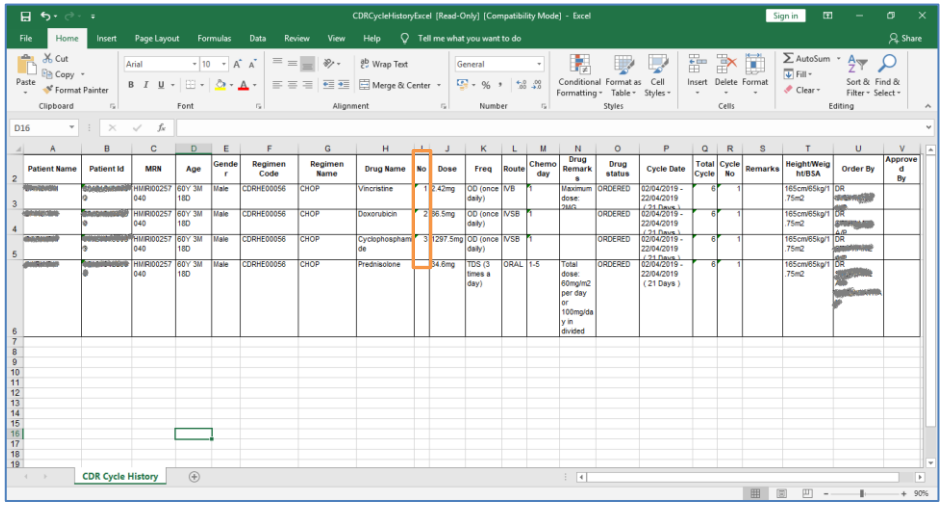


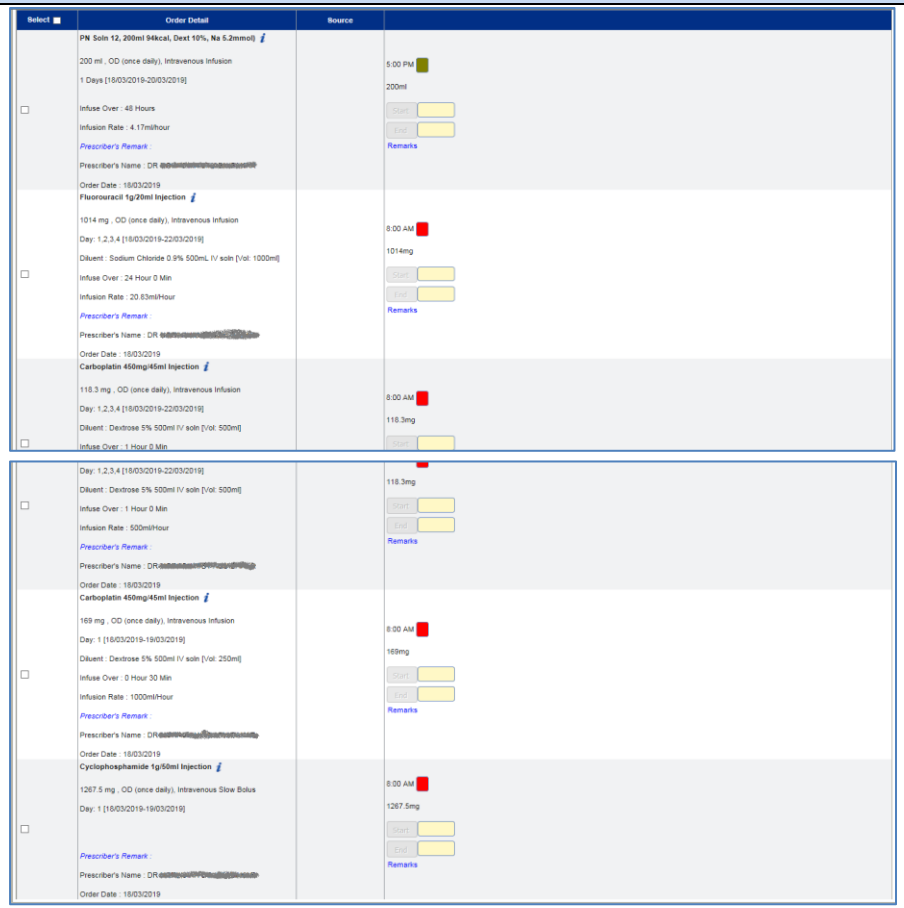
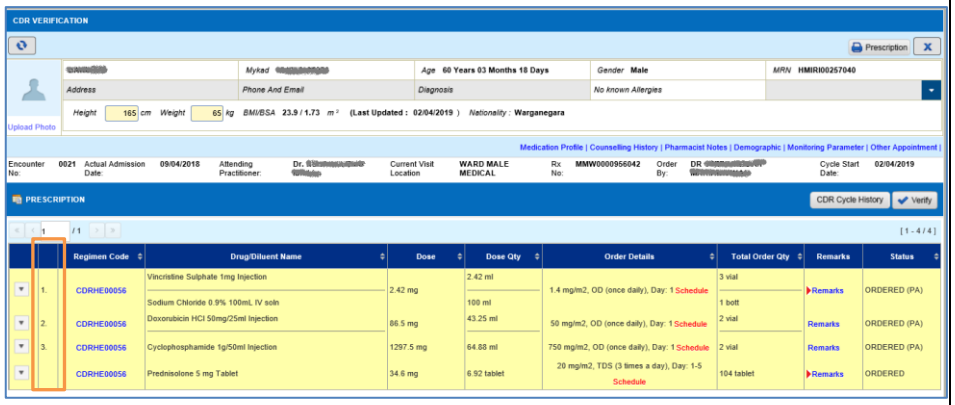




11. In CDR Cycle History, new column for sequence number will be displayed and the sorting drug will be sorted according to the sequence number




12. By clicking on print CDR Cycle History, CDR Cylce History in PDF will be displayed with the sorting of the drug list according to the sequence number

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| | 14. In MAR screen and printed Medication Chart<br>i. If there is a mix of order type (Normal/IV/CDR/PN), CDR order drugs will not be at the top of the current list, group by same CDR Order and not sort. And if there is multiple CDR Order record for the current list, the newest created regimen will be at the top of the list.<br>ii. CDR drugs not highlighted in different row colour.<br>  |  <br>i. On report screen for CDR Cycle History PDF, button 'Export to Excel' is added to print CDR Cycle History in excel format<br>ii. By click on 'Export to Excel' button, Excel document will be displayed with column No for sequence number on the drug list and will be sorted by Regimen and by Regimen Drug sequence number<br>  |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| |  | 13. In CDR Verification, Preparation and Dispensing, new column will be displayed which is displayed the sequence number that have been set, and sorted according to the sequence.<br>  <br>14. In MAR screen and printed Medication Chart<br>i. Existing sorting rules remain, however, if there is a mix of order type (Normal/IV/CDR/PN), CDR order drugs will always be at the top of the current list, group by same CDR Order and sort according to the Regimen Drug sequence. And if there is multiple CDR Order record for the current list, the newest created regimen will be at the top of the list.<br>ii. Sorting is limited to each section either normal drugs or infusion drugs. Each section will be sorted separately.<br>iii. CDR drugs will be highlighted in different row colour, which is in 'Light Purple' colour. |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

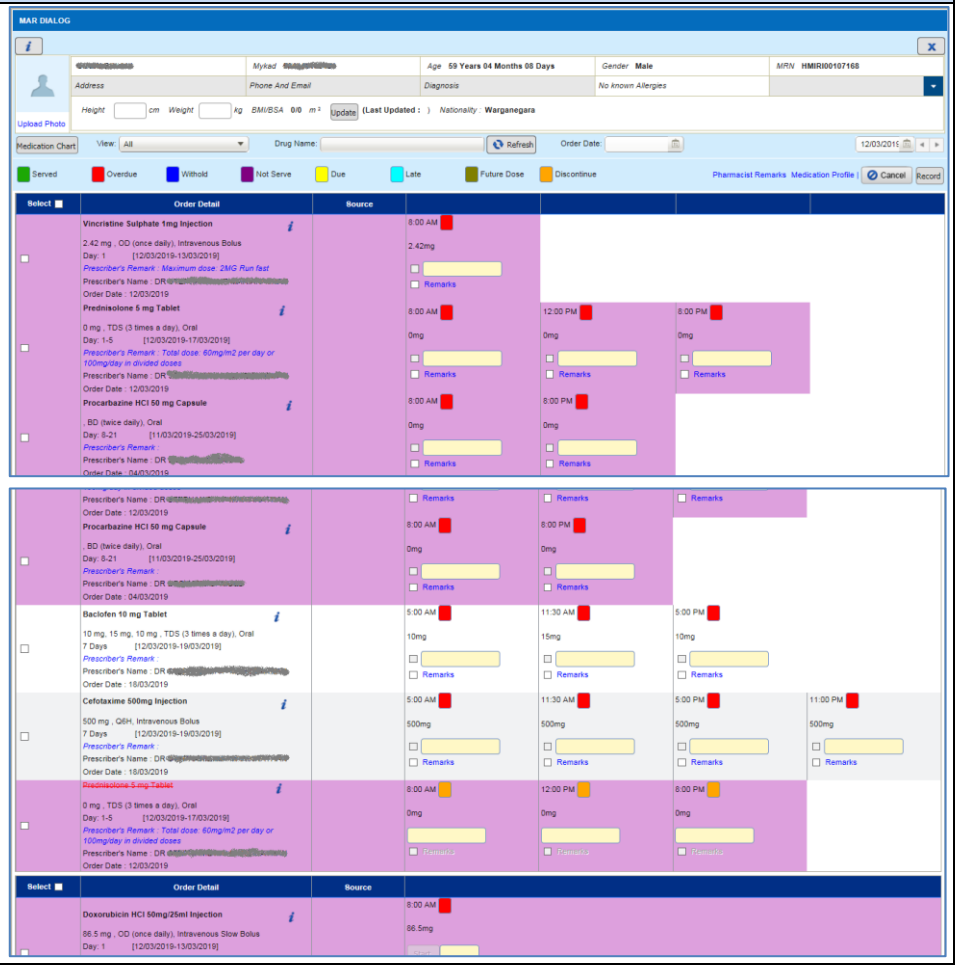
**Hospital Tanah Merah**

**MEDICATION CHART**

Name : OXXXX XXXXXX
ID No : [redacted]
MRN : htmh0000146
Diagnosis : flu

Age : 43Y 06M 14D
Weight : 66 Kg
Ward/Bed : WAD3
Allergy : Simvastatin

| No | Drug Name | Order Details | | Date/Time | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 18/03 | 19/03 | 20/03 | 21/03 | 22/03 | | |
| 1 | Prednisolone 5 mg Tablet<br><br>Prescriber name: DR [redacted]<br><br>Order date: 18/03/2019 03:19 PM | 0 mg, TDS (3 TIMES A DAY), Day: 1-5, Oral<br><br>Remarks : Total dose: 60mg/m2 per daynor 100mg/day in divided doses | 8:00 AM | | | | | | | |
| | | | 12:00 PM | | | | | | | |
| | | | 8:00 PM | | | | | | | |
| 2 | Vincristine Sulphate 1mg Injection<br><br>Prescriber name: DR [redacted] | 2.37 mg, OD (ONCE DAILY), Day: 1, Intravenous Bolus<br><br>Remarks : Maximum | | 18/03 | | | | | | |
| | | | 8:00 AM | | | | | | | |

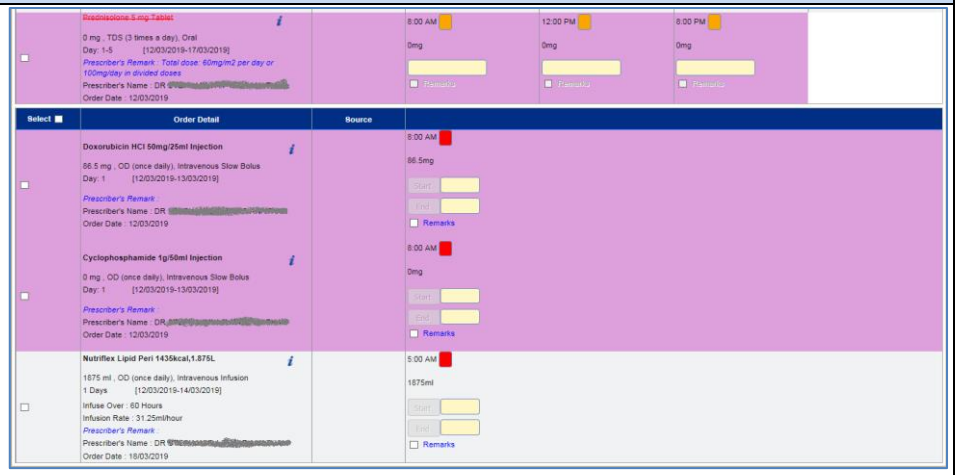


| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

**Current Version 2.0**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | Vincristine Sulphate 1mg Injection<br><br>Prescriber name: DR [redacted]<br><br>Order date: 18/03/2019 03:19 PM | 2.37 mg, OD (ONCE DAILY), Day: 1, Intravenous Bolus<br>Remarks : Maximum dose: 2MG<br>Run fast | | 18/03 | | | | | | | |
| | | | 8:00 AM | | | | | | | | |
| 3 | Cyclophosphamide 1g/50ml Injection<br><br>Prescriber name: DR [redacted]<br><br>Order date: 18/03/2019 03:19 PM | 1267.5 mg, OD (ONCE DAILY), Day: 1, Intravenous Slow Bolus<br>Remarks : | | 18/03 | | | | | | | |
| | | | 8:00 AM | | | | | | | | |
| 4 | Doxorubicin HCl 50mg/25ml Injection<br><br>Prescriber name: DR [redacted]<br><br>Order date: 18/03/2019 03:19 PM | 84.5 mg, OD (ONCE DAILY), Day: 1, Intravenous Bolus<br>Remarks : | | 18/03 | | | | | | | |
| | | | 8:00 AM | | | | | | | | |

**New Version 2.1**




**Hospital Miri**

**MEDICATION CHART**

| | | | |
|---|---|---|---|
| Name | : [redacted] | Age | : 59Y 04M 08D |
| ID No | : [redacted] | Weight | : 65 Kg |
| MRN | : HMIRI00107168 | Ward/Bed | : MMW |
| Diagnosis | : dm | Allergy | : |

| No | Drug Name | Order Details | | Date/Time | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Vincristine Sulphate 1mg Injection<br><br>Prescriber name: DR [redacted]<br><br>Order date: 12/03/2019 08:37 AM | 2.42 mg, OD (ONCE DAILY), Day: 1, Intravenous Bolus<br>Remarks : Maximum dose: 2MG<br>Run fast | | 12/03 | | | | | | |
| | | | 8:00 AM | | | | | | | |
| 2 | Prednisolone 5 mg Tablet<br><br>Prescriber name: DR [redacted] | 0 mg, TDS (3 TIMES A DAY), Day: 1-5, Oral<br>Remarks : Total dose: 60mg/m2 per day or 100mg/day in divided doses | | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | | |
| | | | 8:00 AM | | | | | | | |
| | | | 12:00 PM | | | | | | | |
| | | | 8:00 PM | | | | | | | |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

**Current Version 2.0**

| No | Drug Name | Order Details | | Date/Time | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Carboplatin 450mg/45ml Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:35 PM | 169 mg, OD (ONCE DAILY), Day: 1, Intravenous Infusion<br>Remarks : | | 18/03 | | | | | | |
| | | | 8:00 AM | | | | | | | |
| 6 | Carboplatin 450mg/45ml Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:40 PM | 118.3 mg, OD (ONCE DAILY), Day: 1,2,3,4, Intravenous Infusion<br>Remarks : | | 18/03 | 19/03 | 20/03 | 21/03 | | | |
| | | | 8:00 AM | | | | | | | |
| 7 | Fluorouracil 1g/20ml Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:40 PM | 1014 mg, OD (ONCE DAILY), Day: 1,2,3,4, Intravenous Infusion<br>Remarks : | | 18/03 | 19/03 | 20/03 | 21/03 | | | |
| | | | 8:00 AM | | | | | | | |

**New Version 2.1**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | Prednisolone 5 mg Tablet<br>Prescriber name: DR [redacted]<br>Order date: 12/03/2019 08:37 AM | 0 mg, TDS (3 TIMES A DAY), Day: 1-5, Oral<br>Remarks : Total dose: 60mg/m2 per day or 100mg/day in divided doses | | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | | |
| | | | 8:00 AM | | | | | | | |
| | | | 12:00 PM | | | | | | | |
| | | | 8:00 PM | | | | | | | |
| 3 | Procarbazine HCl 50 mg Capsule<br>Prescriber name: DR [redacted]<br>Order date: 04/03/2019 02:04 AM | , BD (TWICE DAILY), Day: 8-21, Oral<br>Remarks : | | 11/03 | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | 17/03 |
| | | | 8:00 AM (0mg) | | | | | | | |
| | | | 8:00 PM (0mg) | | | | | | | |
| 4 | Baclofen 10 mg Tablet<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 02:56 AM | 10 mg, 15 mg, 10 mg, TDS (3 TIMES A DAY), 7 Days, Oral<br>Remarks : | | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | 17/03 | 18/03 |
| | | | 5:00 AM (10mg) | | | | | | | |
| | | | 11:30 AM (15mg) | | | | | | | |
| | | | 5:00 PM (10mg) | | | | | | | |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|

**Current Version 2.0**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Fluorouracil 1g/20ml Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:40 PM | 1014 mg, OD (ONCE DAILY), Day: 1,2,3,4, Intravenous Infusion<br>Remarks : | 8:00 AM | 18/03 | 19/03 | 20/03 | 21/03 | | | |
| 8 | Baclofen 10 mg Tablet<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:41 PM | 10 mg, TDS (3 TIMES A DAY), 7 Days, Oral<br>Remarks : | 12:00 AM<br>8:00 AM<br>4:00 PM | 18/03 | 19/03 | 20/03 | 21/03 | 22/03 | 23/03 | 24/03 |
| 9 | Cefotaxime 1g Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:41 PM | 1000 mg, Q6H, 5 Days, Intravenous Bolus<br>Remarks : | 12:00 AM<br>6:00 AM<br>12:00 PM<br>6:00 PM | 18/03 | 19/03 | 20/03 | 21/03 | 22/03 | 23/03 | |
| 10 | PN Soln 12, 200ml 94kcal, Dext 10%, Na 5.2mmol)<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:42 PM | 200 ml, OD (ONCE DAILY), 1 Days, Intravenous Infusion<br>Remarks : | 5:00 PM | 18/03 | | | | | | |

15. In View MAR screen.
    i. If there is a mix of order type (Normal/IV/CDR/PN), CDR order drugs will not be at the top of the View MAR list, group by same CDR Order and not sorted. And if there is multiple CDR Order record, the newest created regimen will be at the top of the list.
    ii. Sorted according to normal order sequence as implemented in existing MAR/View MAR screen.
    iii. CDR drugs not highlighted in different row colour.

**New Version 2.1**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Cefotaxime 500mg Injection<br>Prescriber name: DR [redacted]<br>Order date: 18/03/2019 03:00 AM | 500 mg, Q6H, 7 Days, Intravenous Bolus<br>Remarks : | 5:00 AM<br>11:30 AM<br>5:00 PM<br>11:00 PM | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | 17/03 | 18/03 |
| 6 | ~~Prednisolone 5 mg Tablet~~<br>Prescriber name: DR [redacted]<br>Order date: 12/03/2019 08:37 AM | ~~0 mg, TDS (3 TIMES A DAY), Day: 1-5, Oral~~<br>Remarks : Total dose: 60mg/m2 per day or 100mg/day in divided doses | 8:00 AM<br>12:00 PM<br>8:00 PM | 12/03 | 13/03 | 14/03 | 15/03 | 16/03 | | |
| 7 | Doxorubicin HCl 50mg/25ml Injection<br>Prescriber name: DR [redacted]<br>Order date: 12/03/2019 08:37 AM | 86.5 mg, OD (ONCE DAILY), Day: 1, Intravenous Slow Bolus<br>Remarks : | 8:00 AM | 12/03 | | | | | | |
| 8 | Cyclophosphamide 1g/50ml Injection | 0 mg, OD (ONCE DAILY), Day: 1, | 8:00 AM | 12/03 | | | | | | |

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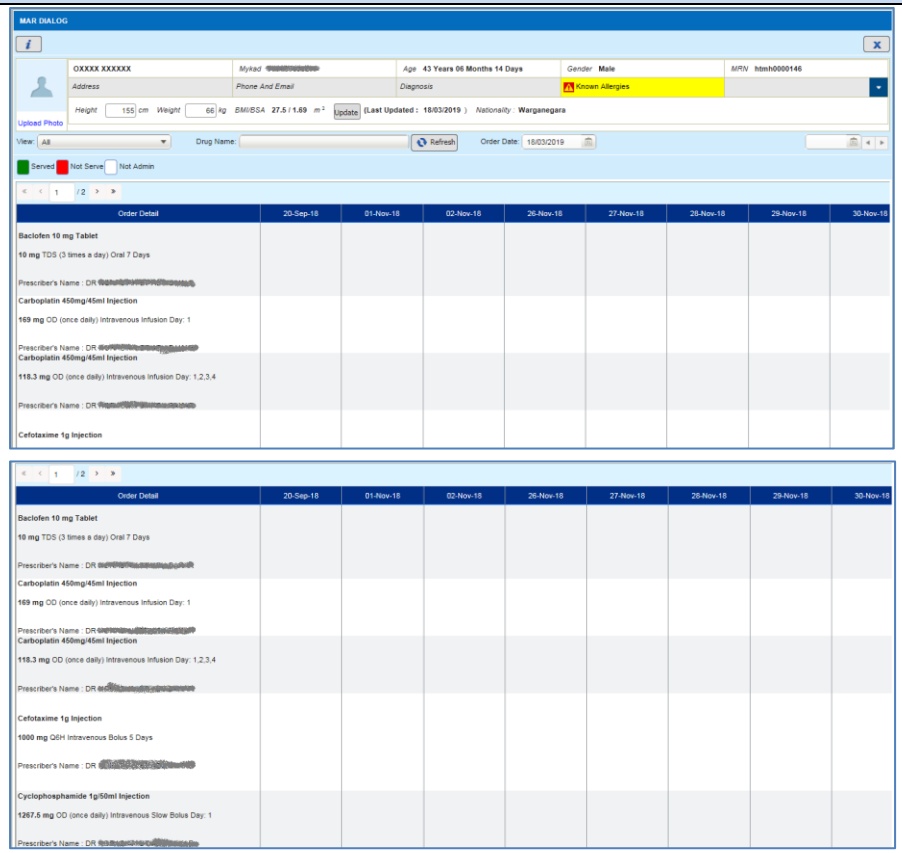
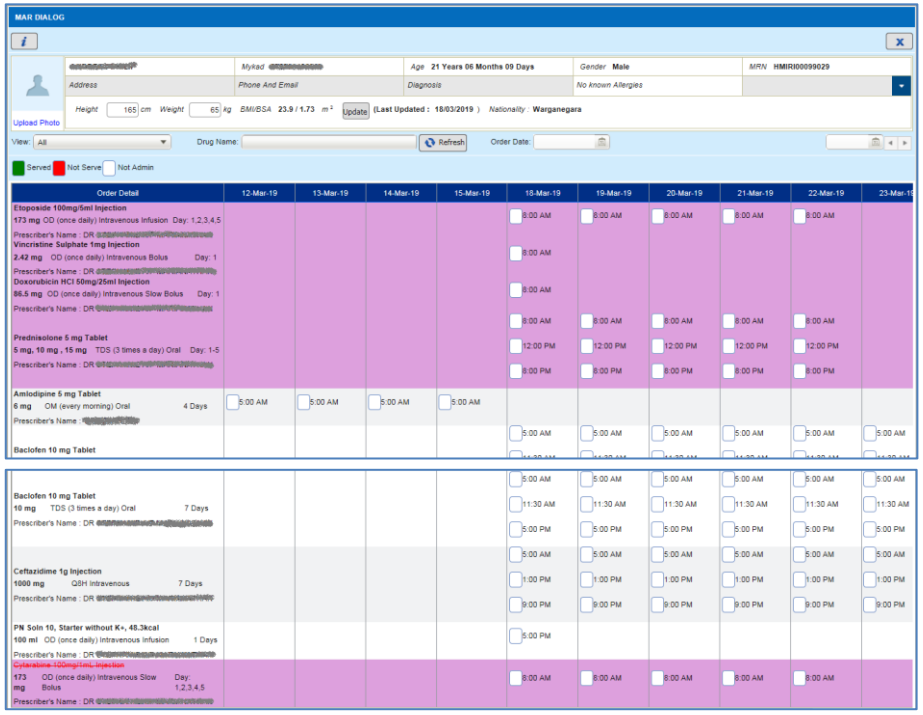
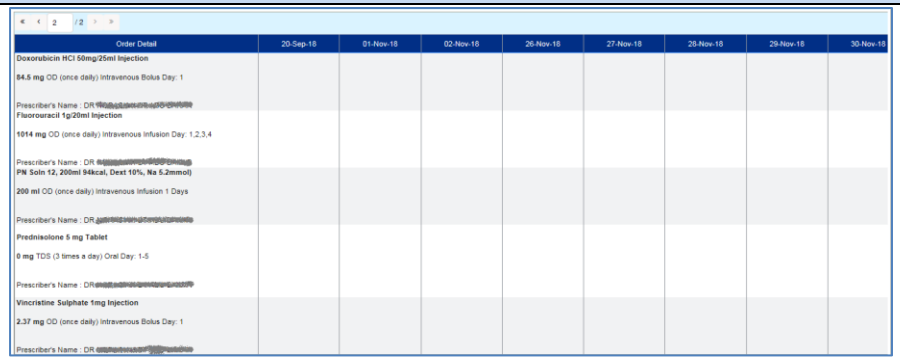
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Cyclophosphamide 1g/50ml Injection<br>Prescriber name: DR STEPHANIE A/P MARIANATHAN<br>Order date: 12/03/2019 08:37 AM | 0 mg, OD (ONCE DAILY), Day: 1, Intravenous Slow Bolus<br>Remarks : | 8:00 AM | 12/03 | | | | | | |
| 9 | Nutriflex Lipid Peri 1435kcal,1.875L<br>Prescriber name: DR STEPHANIE A/P MARIANATHAN<br>Order date: 18/03/2019 03:01 AM | 1875 ml, OD (ONCE DAILY), 1 Days, Intravenous Infusion<br>Remarks : | 5:00 AM | 12/03 | | | | | | |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| |  | 15. In View MAR screen.<br>i. If there is a mix of order type (Normal/IV/CDR/PN), CDR order drugs will always be at the top of the View MAR list, group by same CDR Order and sorted according to the Regimen Drug sequence. And if there is multiple CDR Order record, the newest created regimen will be at the top of the list.<br>ii. Sorting applicable only for Active drugs only. For inactive drugs (cancelled/stop/discontinue) will be sorted according to normal order sequence as implemented in existing MAR/View MAR screen.<br>iii. CDR drugs will be highlighted in different row colour, which is in 'Light Purple' colour.<br>  |

| Function Flow | Current Version 2.0 | New Version 2.1 |
|---|---|---|
| |  | |