



# **Pharmacy Information System (PhIS) and Clinic Pharmacy System (CPS)**

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## **Pharmacy Based**

### **User Manual Infusion Order**

<b>Version</b>	<b>: 13<sup>th</sup> Edition</b>
<b>Document ID</b>	<b>: PB_U. MANUAL_INFUSION ORDER</b>



PhIS & CPS Project  
User Manual – IV (Infusion)



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Application reference: PhIS & CPS v2.6.1



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## 1.0 Introduction

### 1.1 Overview of PhIS

Pharmacy Information System or better known as PhIS, is a complete and comprehensive system that integrates pharmacy related services geared towards pharmacy excellence. PhIS implementation would transform most of current manual process to electronic system to benefit facility end user in the health care sector.

There are 12 modules to assist services delivery by the health care sector which comprises of:

1. Order Management
2. Inpatient Pharmacy
3. Outpatient Pharmacy
4. Medication Counselling
5. Ward Pharmacy
6. Pharmacy Inventory
7. Manufacturing of Cytotoxic Drug Reconstitution, Parenteral Nutrition, IV Admixture & Eye Drop, Radiopharmaceuticals and Extemporaneous
8. Adverse Drug Reaction & Drug Allergic (ADR & DAC)
9. Clinical Pharmacokinetics Services (TDM)
10. Drug Information & Consumer Education (DICE)
11. Medication Therapy Adherence Clinic (MTAC)
12. Data Mining (PhARM)

### 1.2 Purpose and Objectives

This user manual outlines the IV Dispensing sub-module and its key features and functionalities. The primary objective is to guide user through the process of completing PhIS application process.

User will understand the following activities in details:

- Transcribing Infusion Order
- Screening & Verification
- Preparation
- Dispensing
- Release / Discard Batch

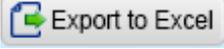
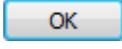
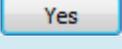
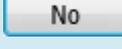
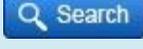
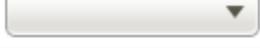
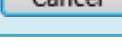
### 1.3 Organised Sections

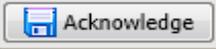
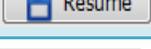
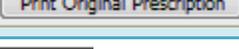
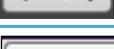
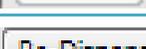
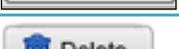
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Infusion Order
- Section 4 : Acronyms
- Section 5 : Links to Clinical Modules

## 2.0 Application Standard Features

### 2.1 PhIS Legend

Standard Legend			
	Login to PhIS		Logout from PhIS
	Close All Open Tabs		Refresh Screen
	Expand Menu		Collapse Menu
	Expand Module		Collapse Module
	Add/Create New Record		Save
	Close Window		Calendar Icon
	Save Transaction		Delete Record
	Export Report From PDF file to Excel file		OK Button
	Yes Button		No Button
	Radio Button	<input type="checkbox"/>	Checkbox
	System Automatic Generate Record No.		Automatically Display/Retrieve Box
	Reset Login Screen		Show Help
	Display Home Tab		Search Record
	Cancel		Dropdown Box
	Search Icon	*	Mandatory Field
	Edit Record		Empty Text Box
	Cancel Button		

IV Dispensing Module Legend			
	Update Patient's Height and Weight		Print
	Acknowledge Prescription		Calendar
	Preparation		Save and Continue
	Edit Label		Dispense
	Resume		Print Original Prescription
	Hold		Verification
	Confirm		Release/Discard
	Re-Dispense		Delete

**Note**

To learn more about Login Information, kindly click [Login Information](#) module for descriptive steps.

### 3.0 Order Management-IV Admixture

#### Overview

The Order Management-Infusion Order module handles all the information to specify the ordered items as per local drug formulary, MOH and non-MOH including registered and non-registered drugs. This function is to enable data mining. All medication orders must be prescribed by authorised personnel only and be in compliance with guidelines on prescribing in the drug formulary (drug category, discipline / specialty) as defined by MOH.

#### User Group

This module is intended for pharmacist and assistant pharmacist (subject to user assign by the facility)

#### Functional Diagram

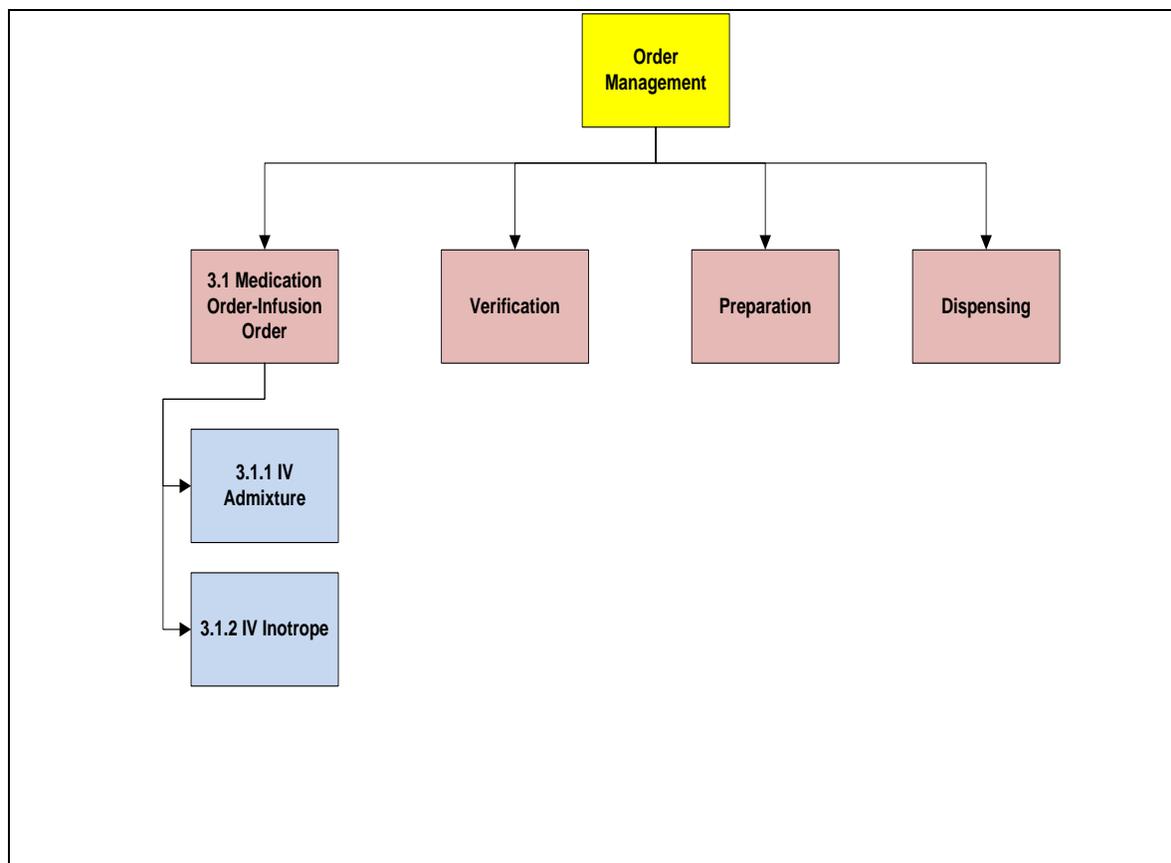


Figure 3.0-1

## Functional Description

Admixture comprises of six (6) main functions:

- **Medication Order- Infusion Order**

To prescribe:

- IV Admixture
- Inotrope order

- **Transcribing**

Transcribing function is used to transfer manual prescription to online prescription. All prescriptions are required to be key in into system in order to proceed with dispensing process such as patient demographic and order details. Transcribing is combination of 2 process which is ordering and dispensing which consist of ordering, verification, preparation and dispensing in single workflow.

- **Screening and Verification**

Screening and verification function is for user to do the checking and verification on the transcribed prescription ordered from prescriber.

- **Preparation**

The preparation function allow user to allocate drug quantity and batch to be dispense based on the transcribed prescription. This function is integrated with inventory system where the stock will be auto deducted after dispensing process. Drug label can be generated, and print based on the prepared drugs. Some of the sub-function is available in this screen like alternate, hold/resume and drug interaction (MIMS) is provided to help user with more effectively and efficiency during preparation process for patient safety purpose.

- **Dispensing**

Dispensing functions is to record and save all the dispensed medication detail information. This function is the mandatory steps to complete the dispense medication process. At this screen, information related with the patient, prescription and prepared drug also is provided.

- **IV Discard Batch**

Release batch function will be used when user decide to un-packed the reserved/prepared drugs. All the release drugs such as tablets, capsule and other than liquid will be stocked back into inventory

### 3.1 Transcribe Infusion Order

Infusion order is used for transcribing medicine for Inpatient, Emergency and Day Care departments based on facility setup.

#### 3.1.1 Search Registered Patient

To view an existing patient record, please perform the steps below.

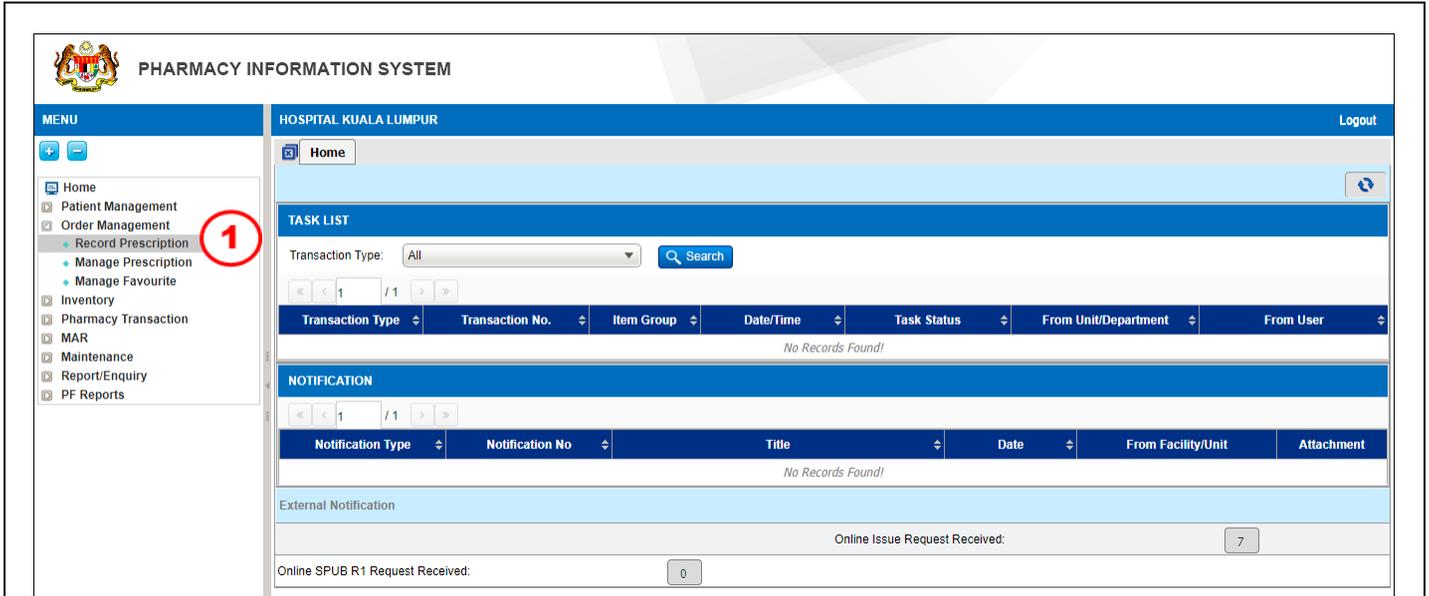


Figure 3.1.1-1 PhIS Home Page

#### STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1.1-1

#### Note

- If the patient is not registered, click on the **New Patient** button and the Patient Registration screen will be displayed.
- User able to view patient visit by click on **Visit Management** button and Visit Management screen will be displayed



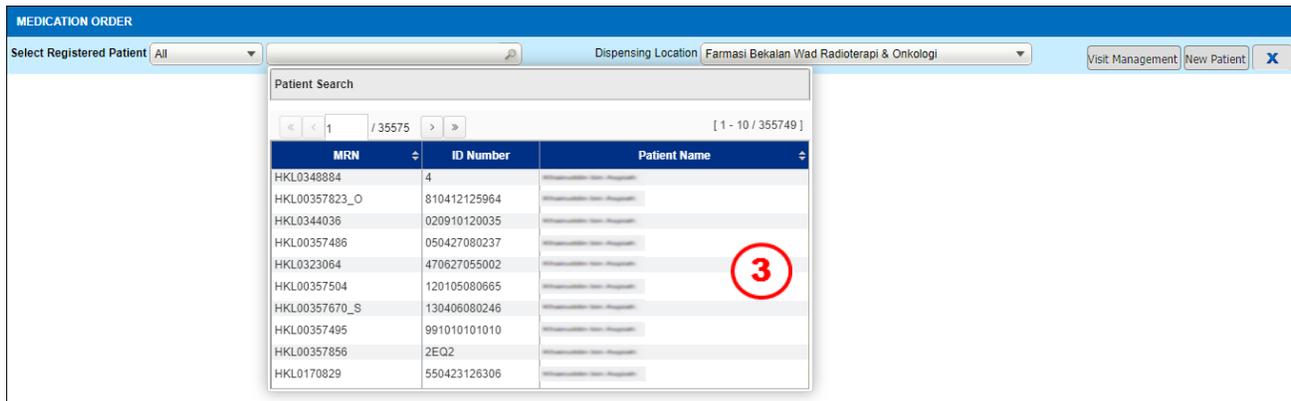
Figure 3.1.1-2 Medication Order

#### STEP 2

Click on the select registered patient and then click on  button to search patient

#### Note

User able to change dispensing location by click on dropdown **Dispensing Location**  button.

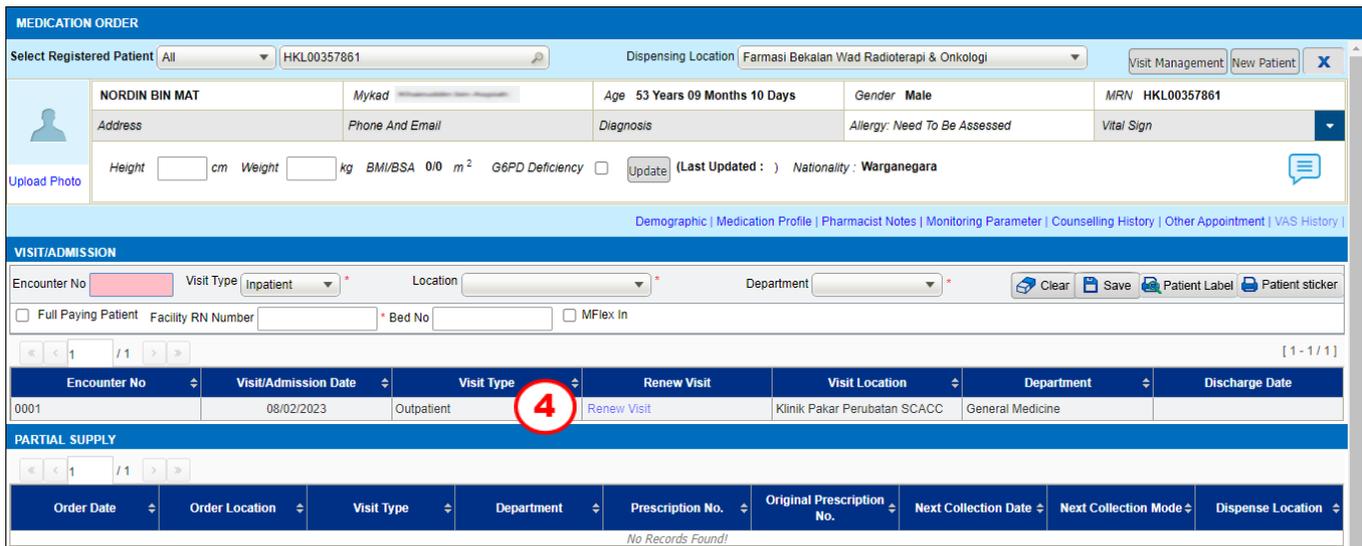


MRN	ID Number	Patient Name
HKL0348884	4	
HKL00357823_O	810412125964	
HKL0344036	020910120035	
HKL00357486	050427080237	
HKL0323064	470627055002	
HKL00357504	120105080665	
HKL00357670_S	130406080246	
HKL00357495	991010101010	
HKL00357856	2EQ2	
HKL0170829	550423126306	

Figure 3.1.1-3 Medication Order

### STEP 3

Double-click on the selected patient and the details will be displayed as per Figure 3.1.1-4



Encounter No	Visit/Admission Date	Visit Type	Renew Visit	Visit Location	Department	Discharge Date
0001	08/02/2023	Outpatient	<a href="#">Renew Visit</a>	Klinik Pakar Perubatan SCACC	General Medicine	

Figure 3.1.1-4 Medication Order

### Note

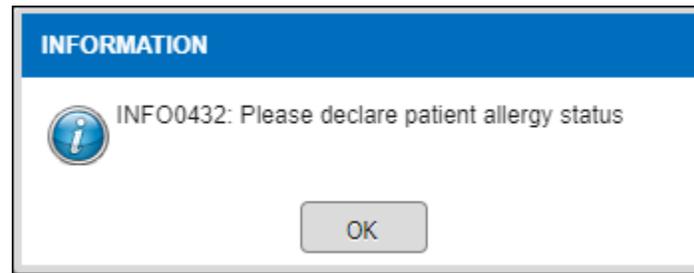
- Click on the 'Renew Visit' hyperlink to renew a visit for the same location.
- Select the 'Visit Type' and 'Location' to create a new visit.
- Click on the [Visit Management](#) to assess 'Visit Management' Screen.

### STEP 4

Double-click on the selected visit and the details will be displayed as per Figure 3.1.1-6

### Note

Once double click on visit details system will pop up message to declare allergy for the patient as shown in Figure 3.1.1-5



**Figure 3.1.1-5 Information Message**

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient | X

---

**Patient Information:**

**NORDIN BIN MAT** | Mykad: [Redacted] | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: [Redacted] | Phone And Email: [Redacted] | Diagnosis: [Redacted] | Allergy: Need To Be Assessed | Vital Sign: [Redacted]

Height: [ ] cm | Weight: [ ] kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency:  | Update (Last Updated: ) | Nationality: Warganegara

[Demographic](#) | [Medication Profile](#) | [Pharmacist Notes](#) | [Monitoring Parameter](#) | [Counselling History](#) | [Other Appointment](#) | [VAS History](#)

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**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine | Clear | Patient Label | Patient sticker

Facility RN Number: [ ] | MFlex In:

---

**VISIT RECORD**

Original Prescription Serial Number: [ ]

---

**NORMAL ORDER - DRUG DETAILS** | Total Price: RM 0.00

View Order | Draft | Confirm

Original Prescriber Name: [ ] | Drug: [ ] | Dosage: 0 | Admin Route: [ ] | Frequency: [ ] | Dosage Schedule: [ ]

Advanced Search

Patient Own Medication  
 Ward Stock  
 Patient Require Counselling

Alert	Drug Name	Order Details	Order Qty	Drug Info

**Figure 3.1.1-6 Medication Order**

### 3.1.2 New Patient Registration

To register a new patient, please perform the steps below.

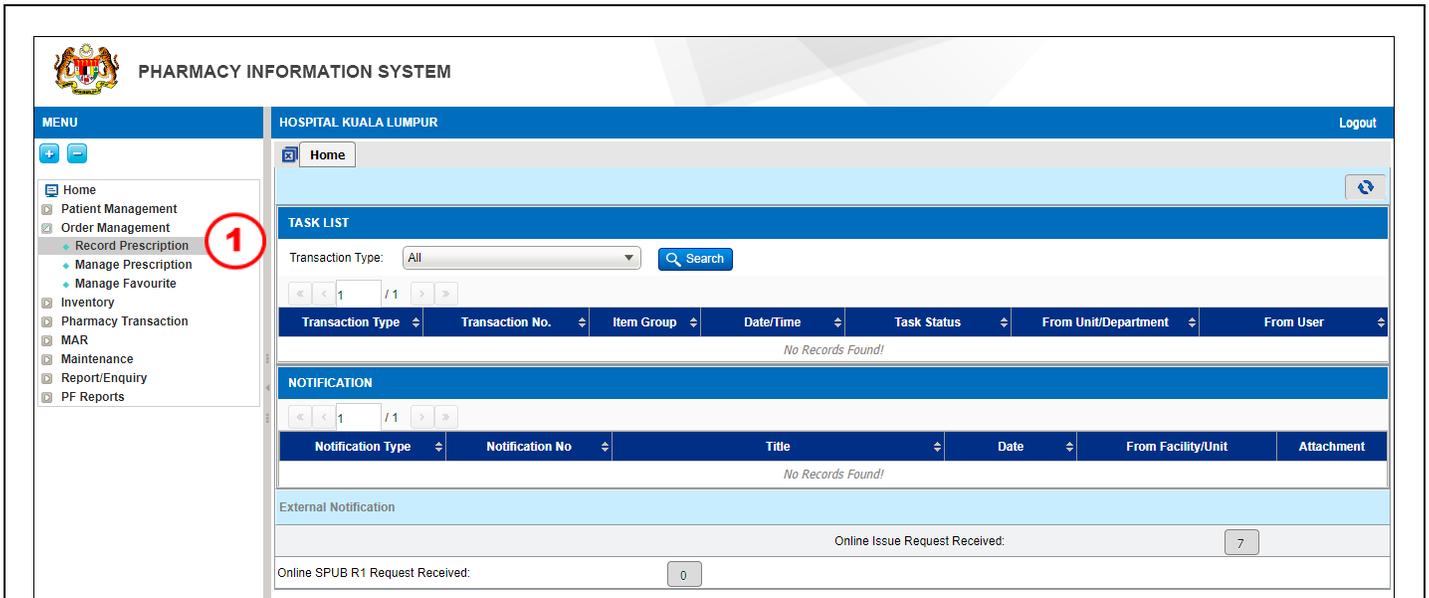


Figure 3.1.2-1 PhIS Home page

#### STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1.2-1



Figure 3.1.2-2 Transcribe Order Create New Patient

#### STEP 2

Click on  button to create new patient

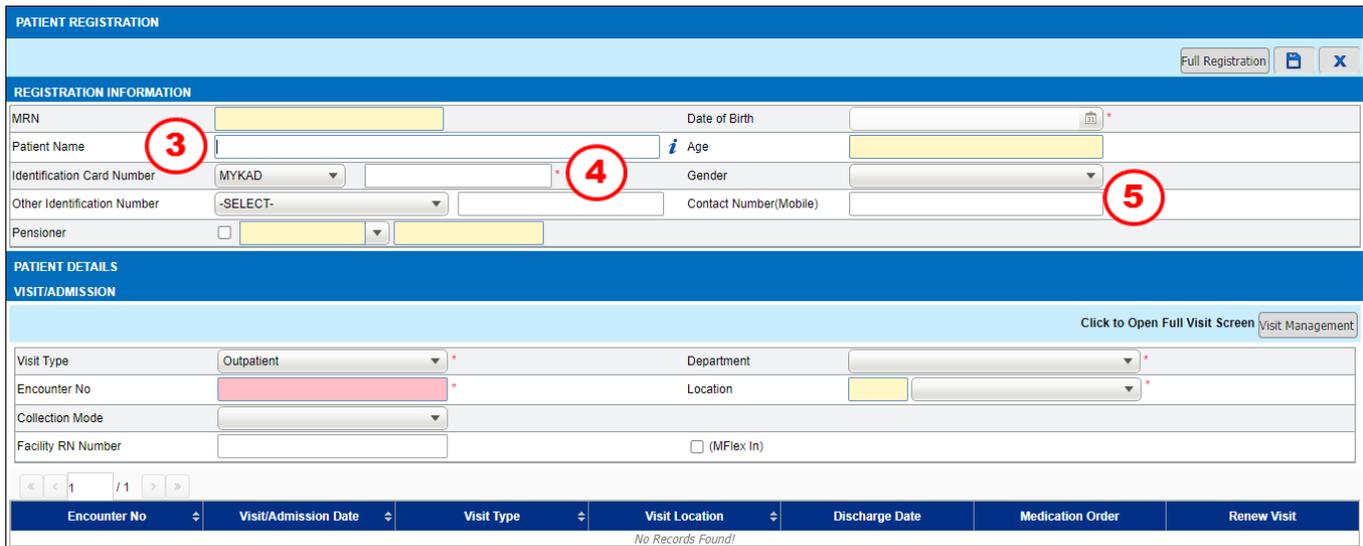


Figure 3.1.2-3 Registration Information

### STEP 3

Enter **Patient Name**

### STEP 4

Select from **Identification Card Number** drop down box:

- MYKAD
- MYKID

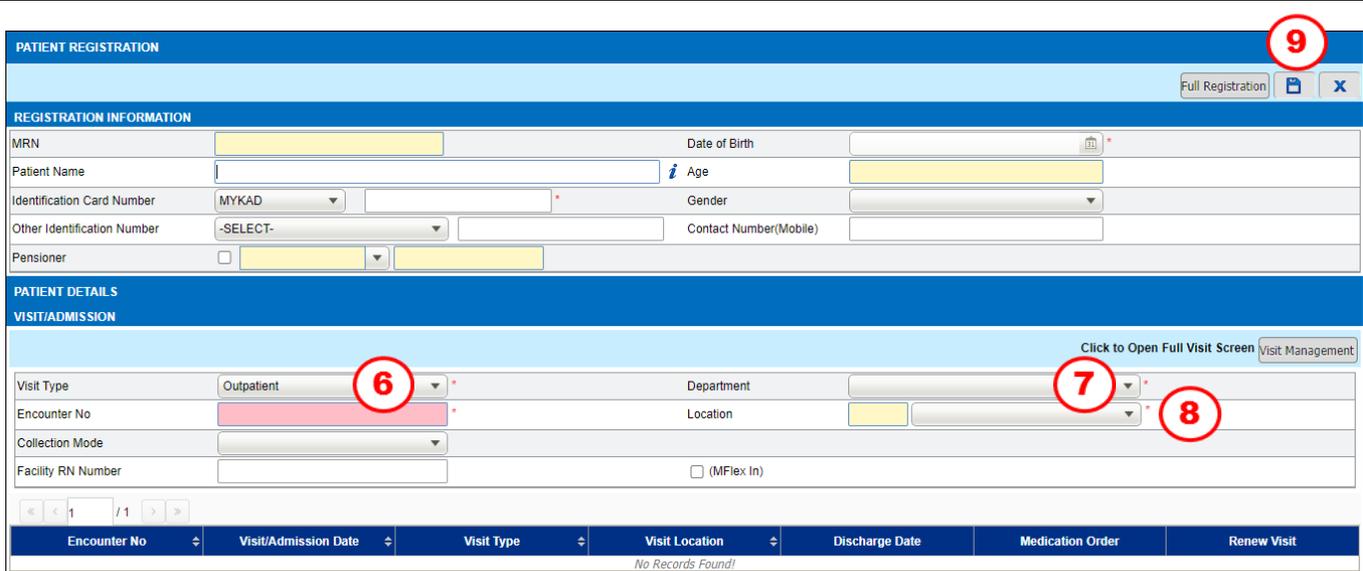
and enter the relevant number

### Note

- After enter the **Identification Card Number** the below details will be displayed:
  - Date of Birth (dd/mm/yy)
  - Age (42 Y 05M 21D)
  - Gender (Male/Female)
- If MYKAD/MYKID is unavailable, user is required to select the **Other Identification Number** dropdown box:
  - BIRTH CERTIFICATE
  - DRIVING LICENSE
  - FATHER IC
  - MILITARY CARD NUMBER
  - MOTHER IC
  - MYKAS
  - MYPR
  - OLD IC
  - OTHERS
  - PASSPORT
  - PENSION CARD
  - POLICE CARD NUMBER
  - UNHCR
  - UNKNOWN PATIENT
  - WORK PERMITand enter the relevant number.

### STEP 5

Enter **Contact Number (Mobile)**



**PATIENT REGISTRATION**

Full Registration [Save] [X]

**REGISTRATION INFORMATION**

MRN [ ] Date of Birth [ ] \*

Patient Name [ ] Age [ ]

Identification Card Number MYKAD [ ] \* Gender [ ]

Other Identification Number [-SELECT-] [ ] Contact Number(Mobile) [ ]

Pensioner  [ ] [ ]

**PATIENT DETAILS**

**VISIT/ADMISSION**

Click to Open Full Visit Screen Visit Management

Visit Type Outpatient (6) \* Department (7) \* Location (8) \*

Encounter No [ ] \* Collection Mode [ ] Facility RN Number [ ]  (MFlex In)

< < 1 / 1 > >

Encounter No	Visit/Admission Date	Visit Type	Visit Location	Discharge Date	Medication Order	Renew Visit

No Records Found!

Figure 3.1.2-4 Visit/Admission

### STEP 6

Select the **Visit Type** from dropdown box

- Daycare
- Emergency
- Inpatient
- Outpatient
- Outsource
- PAC
- SPUB
- Walk-In

### Note

- User able to use  (MFlex In) checkbox. (MFlex In) is not necessary used to create new visit for Methadone patient but it's used to indicate that this patient as Methadone patient.
- User able to select collection mode as:
  - Appointment Card
  - Email and Take
  - Fax and Take
  - Normal Collection
  - Others
  - Comm. Apps in Smart Phone
  - Telephone And Take
  - UMP
  - Locker4U
  - Leave and Collect
  - Walk-in/Without Appointment

### STEP 7

Select the **Department** from dropdown box:

### Note

**Department** will tie to the selected visit type.

### STEP 8

Select **Location** from dropdown box

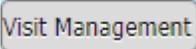
**Note**

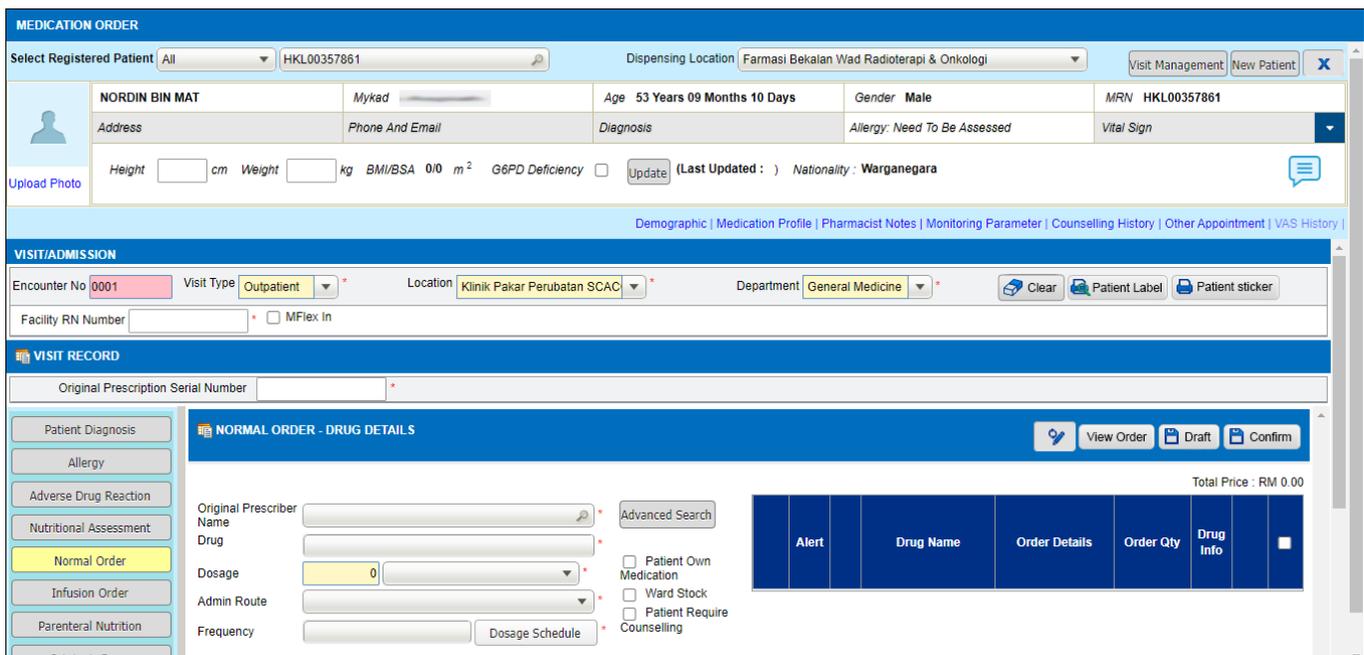
**Location** will tie to the selected Department.

**STEP 9**

Click on the  button to save the record

**Note**

- After clicking the save button, system will automatically generate the **MRN** (Medical Record Number) and ,  and  buttons will be enabled.
- Click on the  button to assess 'Visit Management' Screen.
- Another option to register a new patient is to click on the  button located under Patient Quick Registration

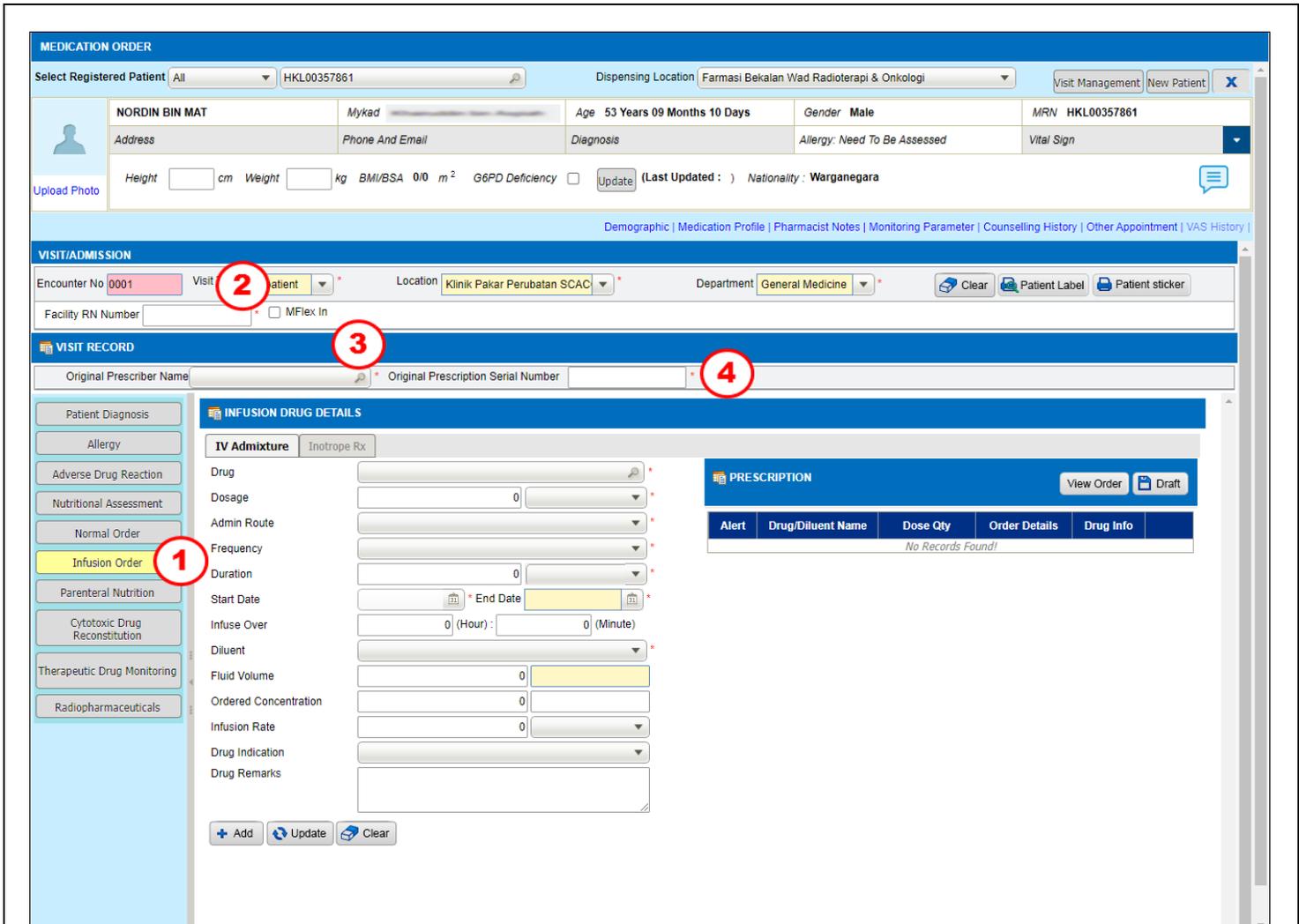


The screenshot displays the 'MEDICATION ORDER' interface. At the top, it shows the 'Select Registered Patient' dropdown set to 'All' and the patient ID 'HKL00357861'. The 'Dispensing Location' is 'Farmasi Bekalan Wad Radioterapi & Onkologi'. Below this, patient details for 'NORDIN BIN MAT' are shown, including age (53 years 09 months 10 days), gender (Male), and MRN (HKL00357861). There are buttons for 'Visit Management' and 'New Patient'. The 'VISIT/ADMISSION' section shows 'Encounter No 0001', 'Visit Type Outpatient', 'Location Klinik Pakar Perubatan SCAC', and 'Department General Medicine'. The 'VISIT RECORD' section includes 'Original Prescription Serial Number'. The 'NORMAL ORDER - DRUG DETAILS' section has a sidebar with 'Normal Order' selected. It contains fields for 'Original Prescriber Name', 'Drug', 'Dosage' (0), 'Admin Route', and 'Frequency'. There are checkboxes for 'Patient Own Medication', 'Ward Stock', and 'Patient Require Counselling'. A table with columns 'Alert', 'Drug Name', 'Order Details', 'Order Qty', and 'Drug Info' is visible. The total price is RM 0.00.

**Figure 3.1.2-5 Medication Order**

### 3.2 Infusion Transcribe Order, Verify, Prepare and Dispense

A function for a pharmacist to order injectable medication that required further dilution before administration. However, it only applicable for medication that are diluted by pharmacist department. If the dilution is prepared by nursing personnel, please use normal order function.



The screenshot shows the 'MEDICATION ORDER' interface. At the top, there is a patient selection section with 'Select Registered Patient' set to 'All' and 'HKL00357861'. The patient details for 'NORDIN BIN MAT' are displayed, including age (53 Years 09 Months 10 Days), gender (Male), and MRN (HKL00357861). Below this is the 'VISIT/ADMISSION' section with 'Encounter No' 0001, 'Visit' set to 'Patient' (circled with a red '2'), 'Location' 'Klinik Pakar Perubatan SCAC', and 'Department' 'General Medicine'. The 'VISIT RECORD' section shows 'Original Prescriber Name' and 'Original Prescription Serial Number' (circled with a red '4'). On the left, a navigation menu has 'Infusion Order' highlighted (circled with a red '1'). The main area is 'INFUSION DRUG DETAILS' with fields for 'Drug', 'Dosage', 'Admin Route', 'Frequency', 'Duration', 'Start Date', 'End Date', 'Infuse Over', 'Diluent', 'Fluid Volume', 'Ordered Concentration', 'Infusion Rate', 'Drug Indication', and 'Drug Remarks'. A 'PRESCRIPTION' table is empty, showing 'No Records Found!'. Red circles with numbers 1, 2, 3, and 4 highlight the 'Infusion Order' tab, the 'Visit' dropdown, the 'Original Prescriber Name' search button, and the 'Original Prescription Serial Number' field respectively.

Figure 3.2-1 Medication Order

#### STEP 1

Click on the **Infusion Order** tab

#### STEP 2

Enter **Facility RN Number**

#### STEP 3

Click on the  button to search **Original Prescriber Name** as shown in Figure 3.2-2

#### STEP 4

Enter **Original Prescription Serial Number**

Search	
[ 1 - 10 / 2837 ]	
Prescriber Name	Department/Discipline
	Nuclear Medicine
	Nuclear Medicine
	Orthopaedic
<b>5</b>	General Medicine
	Radiology
	General Medicine
	General Medicine
	Orthopaedic
	Breast And Endocrine Surgery
	Histopathology (Anatomical Pathology)

Figure 3.2-2 List of Prescriber Name

**STEP 5**

Double click on the selected prescriber

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient

---

**NORDIN BIN MAT** | Mykad: | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: | Phone And Email: | Diagnosis: | Allergy: Need To Be Assessed | Vital Sign:

Height: cm | Weight: kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency:  | Update (Last Updated: ) | Nationality: Warganegara

[Demographic](#) | [Medication Profile](#) | [Pharmacist Notes](#) | [Monitoring Parameter](#) | [Counselling History](#) | [Other Appointment](#) | [VAS History](#)

---

**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine | Clear | Patient Label | Patient sticker

Facility RN Number: RN0023AW | MFlex In:

---

**VISIT RECORD**

Original Prescriber Name: | Original Prescription Serial Number: AE228977

---

Patient Diagnosis

Allergy

Adverse Drug Reaction

Nutritional Assessment

Normal Order

Infusion Order

Parenteral Nutrition

Cytotoxic Drug Reconstitution

Therapeutic Drug Monitoring

Radiopharmaceuticals

**INFUSION DRUG DETAILS**

**IV Admixture** | Inotrope Rx

Drug:

Dosage: 0

Admin Route:

Frequency:

Duration: 0

Start Date: | End Date:

Infuse Over: 0 (Hour) : 0 (Minute)

Diluent:

Fluid Volume: 0

Ordered Concentration: 0

Infusion Rate: 0

Drug Indication:

Drug Remarks:

**PRESCRIPTION**

[View Order](#) | [Draft](#)

Alert	Drug/Diluent Name	Dose Qty	Order Details	Drug Info
No Records Found!				

Figure 3.2-3 Medication Order

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**STEP 6**

Click on the  button new window will display as per Figure 3.2-4

Drug/Active Ingredient Search <span style="float: right;">X</span>			
Drug/Active Ingredient/Trade Name <input type="text"/>			Search
<input type="button" value="&lt;"/> <input type="button" value="1"/> <input type="button" value="/ 8"/> <input type="button" value="&gt;"/> <input type="button" value="»"/> <span style="float: right;">[ 1 - 20 / 145 ]</span>			
Dosage Form	Drug Name	Active Ingredient	Category
Parenteral Solution	Erythromycin Lactobionate 500 mg Injection	Erythromycin	A*
Parenteral Solution	Cefotaxime 500mg Injection	Cefotaxime	A
Parenteral Solution	Chloramphenicol 1g Injection	Chloramphenicol	B
Parenteral Solution	Calcitonin (Synthetic Salmon) 50 IU Injection	Calcitonin	A*
Powder for IV Soln	Desferrioxamine 500mg Injection	Desferrioxamine (Desferrioxamine)	A
Parenteral Solution	Meropenem 500mg Injection	Meropenem	A*
Parenteral Solution	Meropenem 1000mg Injection (1g)	Meropenem	A*
Parenteral Solution	Ertapenem 1g Injection	Ertapenem	A*
Parenteral Solution	Cefotaxime 1g Injection	Cefotaxime	A
Powder for IV Soln	Alteplase 50mg/50ml Powder for Injection (rTPA)	Alteplase	A
Parenteral Solution	Ceftriaxone 1g Injection	Ceftriaxone	A
Parenteral Solution	Calcitonin (synthetic Salmon) 100 IU Injection	Calcitonin	A*
Parenteral Solution	Cefuroxime 750mg Injection	Cefuroxime	A
Parenteral Solution	Imipenem 500mg+Cilastatin Injection	Imipenem+ cilastatin	A*
Parenteral Solution	Doripenem 500mg/10ml Injection	Doripenem	A*
Parenteral Solution	Clarithromycin 500mg Injection	Clarithromycin	A*

**Figure 3.2-4 Drug/Active Ingredient Search**

**Note**

Double click on the selected drug.

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient

**NORDIN BIN MAT** | Mykad: [redacted] | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: [redacted] | Phone And Email: [redacted] | Diagnosis: [redacted] | Allergy: Need To Be Assessed | Vital Sign: [redacted]

Height: [ ] cm | Weight: [ ] kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency:  | Update (Last Updated: ) | Nationality: Warganegara

**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine

Facility RN Number: RN0023AW | MFlex In:

**VISIT RECORD**

Original Prescriber Name: [redacted] | Original Prescription Serial Number: AE228977

Patient Diagnosis

Allergy

Adverse Drug Reaction

Nutritional Assessment

Normal Order

Infusion Order

Parenteral Nutrition

Cytotoxic Drug Reconstitution

Therapeutic Drug Monitoring

Radiopharmaceuticals

**INFUSION DRUG DETAILS**

**IV Admixture** | Inotrope Rx

Drug: Cefotaxime 500mg Injection

Dosage: 500 mg

Admin Route: IV Bolus

Frequency: Q6H

Duration: 1 Days

Start Date: 08/02/2023 4:10 | End Date: 09/02/2023 4:10 PM

Infuse Over: 0 (Hour) : 20 (Minute)

Diluent: [redacted]

Fluid Volume: 0

Ordered Concentration: 0

Infusion Rate: 0

Drug Indication: Third-Generation Cephalosporins

Drug Remarks:

**PRESCRIPTION**

Alert	Drug/Diluent Name	Dose Qty	Order Details	Drug Info
No Records Found!				

8
7

+ Add
Update
Clear

Figure 3.2-5 Infusion Drug Details

**Note**

- End Date is defaulted by the system according to duration.
- Information on IV Admixture screen will be automatically displayed and calculated based on the master setup.
- Infusion Rate = Fluid Volume / Infuse Over
- Strength = Dosage / Fluid Volume.

**STEP 7**

Select diluents from drop down menu

**STEP 8**

Click on the button to add drug in prescription section as per Figure 3.2-6

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient

**NORDIN BIN MAT** | Mykad: [Redacted] | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: [Redacted] | Phone And Email: [Redacted] | Diagnosis: [Redacted] | Allergy: Need To Be Assessed | Vital Sign: [Redacted]

Height: [Redacted] cm | Weight: [Redacted] kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency: [Redacted] | Update (Last Updated: ) | Nationality: Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment | VAS History

**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine | Clear | Patient Label | Patient sticker

Facility RN Number: RN0023AW | MFlex In: [Redacted]

**VISIT RECORD**

Original Prescriber Name: [Redacted] | Original Prescription Serial Number: AE228977

**INFUSION DRUG DETAILS**

IV Admixture: Inotrope Rx

Drug: [Redacted] | Dosage: 0 | Admin Route: [Redacted] | Frequency: [Redacted] | Duration: 0 | Start Date: [Redacted] | End Date: [Redacted]

**PRESCRIPTION** | View Order | Draft

Alert	Drug/Diluent Name	Dose Qty	Order Details	Drug Info
Drug Interactio	Cefotaxime 500mg Injection	5 ml	500 mg, Q6H, 1 Days	[Redacted]
	Dextrose 5% 100ml IV soln	100 ml		[Redacted]

Figure 3.2-6 Infusion Drug Details

**STEP 9**

Click on the button to save the prescription and screen will display one new button as per Figure 3.2-7

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient

**NORDIN BIN MAT** | Mykad: [Redacted] | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: [Redacted] | Phone And Email: [Redacted] | Diagnosis: [Redacted] | Allergy: Need To Be Assessed | Vital Sign: [Redacted]

Height: [Redacted] cm | Weight: [Redacted] kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency: [Redacted] | Update (Last Updated: ) | Nationality: Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment | VAS History

**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine | Clear | Patient Label | Patient sticker

Facility RN Number: RN0023AW | MFlex In: [Redacted]

**VISIT RECORD**

Original Prescriber Name: [Redacted] | Original Prescription Serial Number: AE228977

**INFUSION DRUG DETAILS**

IV Admixture: Inotrope Rx

Drug: [Redacted] | Dosage: 0 | Admin Route: [Redacted] | Frequency: [Redacted] | Duration: 0 | Start Date: [Redacted] | End Date: [Redacted]

**PRESCRIPTION** | View Order | Draft | Confirm

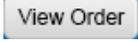
Alert	Drug/Diluent Name	Dose Qty	Order Details	Drug Info
Drug Interactio	Cefotaxime 500mg Injection	5 ml	500 mg, Q6H, 1 Days	[Redacted]
	Dextrose 5% 100ml IV soln	100 ml		[Redacted]

Figure 3.2-7 Infusion Drug Details

**STEP 10**

Click on the button to confirm the prescription

**Note**

- Click on the  button to view order details as per Figure 3.2-8.

ORDER DETAILS						
Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	Remarks	Status
Cefotaxime 500mg Injection	500 mg	5 ml	5 mg/ml, Q6H, 1 Days	4 vial		DRAFT
Dextrose 5% 100ml IV soln		100 ml		4 bott		

Figure 3.2-8 Order Details

- Once click on confirm button, record will be display as shown in Figure 3.2-9

**MEDICATION ORDER**

Select Registered Patient: All | HKL00357861 | Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkologi | Visit Management | New Patient

---

**PATIENT INFORMATION**

NORDIN BIN MAT | Mykad: | Age: 53 Years 09 Months 10 Days | Gender: Male | MRN: HKL00357861

Address: | Phone And Email: | Diagnosis: | Allergy: Need To Be Assessed | Vital Sign:

Height: cm | Weight: kg | BMI/BSA: 0/0 m<sup>2</sup> | G6PD Deficiency:  | Update (Last Updated: ) | Nationality: Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment | VAS History

---

**VISIT/ADMISSION**

Encounter No: 0001 | Visit Type: Outpatient | Location: Klinik Pakar Perubatan SCAC | Department: General Medicine | Clear | Patient Label | Patient sticker

Facility RN Number: RN0023AW | MFlex In:

---

**VISIT RECORD**

Original Prescriber Name: | Original Prescription Serial Number: AE228977

---

**PRESCRIPTION**

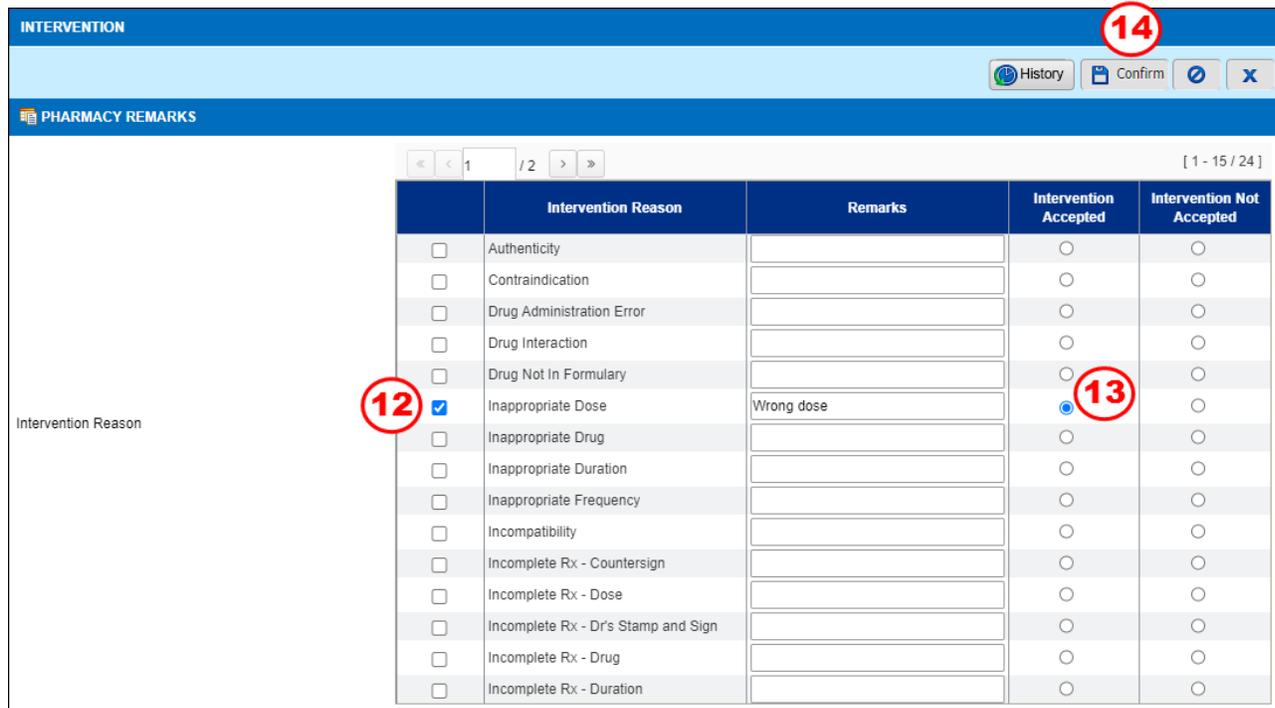
Verify | Preview Prescription

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	Remarks	Status	Drug Info
Drug Interactor	Cefotaxime 500mg Injection	500 mg	5 ml	5 mg/ml, 1 Days	4 vial	Remarks	ORDERED	i
	Dextrose 5% 100ml IV soln		95 ml		4 bott			

Figure 3.2-9 Infusion Drug Detail

- Click on the  button to view prescription detail as per Figure 3.2-10
- Preview prescription button enable after user save the order





Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
<input type="checkbox"/> Authenticity		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Contraindication		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Drug Administration Error		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Drug Interaction		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Drug Not In Formulary		<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Inappropriate Dose	Wrong dose	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Inappropriate Drug		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Inappropriate Duration		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Inappropriate Frequency		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incompatibility		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incomplete Rx - Countersign		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incomplete Rx - Dose		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incomplete Rx - Dr's Stamp and Sign		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incomplete Rx - Drug		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incomplete Rx - Duration		<input type="radio"/>	<input type="radio"/>

Figure 3.2-12 Intervention

**STEP 12**

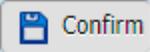
Select **Intervention Reason** from the table

**STEP 13**

Select **Intervention Status** as follow:

- a) Accepted
- b) Not Accepted

**STEP 14**

Click on the  button to confirm **Modify Order**

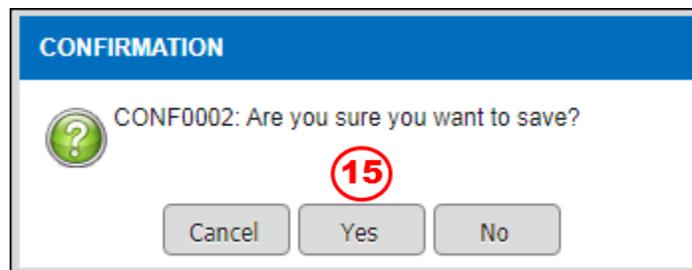
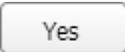


Figure 3.2-13 Confirmation Alert Message

**STEP 15**

Click on the  button to confirm the intervention

VISIT RECORD										
Original Prescriber Name		Dr Mohd Ariff Ridzwan Bin Ackb			* Original Prescription Serial Number		AE228977			*
PRESCRIPTION										
<span style="border: 2px solid red; border-radius: 50%; padding: 2px 5px; font-weight: bold;">16</span> <input checked="" type="checkbox"/> Verify <input type="button" value="Preview Prescription"/>										
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	Remarks	Status	Drug Info		
<input type="checkbox"/> Drug <input type="checkbox"/> Interaction	Cefotaxime 500mg Injection	500 mg	5 ml	5 mg/ml , 1 Days	4 vial	Remarks	ORDERED	<input type="button" value="i"/>		
	Dextrose 5% 100ml IV soln		95 ml		4 bott					

Figure 3.2-14 Infusion Drug Detail

**STEP 16**

Click on the  button and will display alert message as per Figure 3.2-15

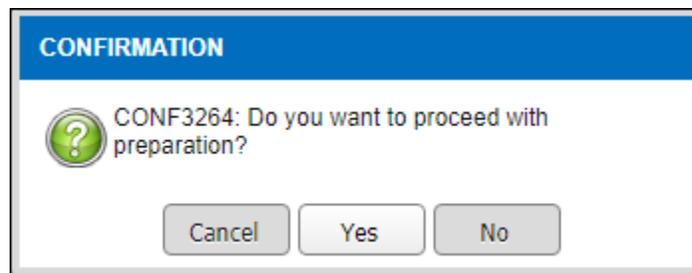


Figure 3.2-15 Confirmation Alert Message

**STEP 17**

Click on the  button to proceed verification and IV Preparation screen will be displayed as per Figure 3.2-16

IV PREPARATION													
<input type="button" value="X"/>													
	NORDIN BIN MAT		Mykad	Age 53 Years 09 Months 10 Days		Gender Male		MRN HKL00357861					
	Address		Phone And Email		Diagnosis		Allergy: Need To Be Assessed		Vital Sign				
	Height <input type="text"/> cm		Weight <input type="text"/> kg		BMI/BSA 0/0 m <sup>2</sup>		<input type="button" value="Update"/> (Last Updated : )		Nationality : Warganegara				
<a href="#">Demographic</a>   <a href="#">Medication Profile</a>   <a href="#">Pharmacist Notes</a>   <a href="#">Monitoring Parameter</a>   <a href="#">Counseling History</a>   <a href="#">Other Appointment</a>													
Encounter No: 0001 Actual Visit Date: 08/02/2023 Visit Location: Klinik Pakar Perubatan SCACC Order By: Ordered By:													
PHARMACY ORDER													
Supervised By <input type="text"/>													
PRESCRIPTION													
<input type="button" value="←"/> <input type="button" value="1"/> / 1 <input type="button" value="→"/>													
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
<input type="checkbox"/> Drug <input type="checkbox"/> Interaction	Cefotaxime 500mg Injection	500 mg	5 ml	5 mg/ml, Q6H , 1 Days	4 vial	4	0 vial	4 vial	<input type="checkbox"/> <input type="button" value="Details"/>	0 vial	Remarks	VERIFIED	<input type="button" value="Drug Info"/>
	Dextrose 5% 100ml IV soln		95 ml		4 bott		0 bott	4 bott					

Figure 3.2-16 IV Preparation Screen

**Note**

**Alternate Drug**

- This function allow user to select different drug with the same active ingredient and same administration route.  
Click on the  button to select **Alternate Drug/ Intervention/ Hold Order**

PHARMACY ORDER													
Supervised By <input type="text"/>													
PRESCRIPTION													
<input type="button" value="Prepare"/> <input type="button" value="Worksheet"/> <input type="button" value="Label"/>													
<input type="button" value="1"/> / 1													
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
	Alteplase 50mg/50ml Powder for Injection (TPA)	50 mg	50 ml	0.5 mg/ml, Single Dose, 1 Days	1 EA	0	0 EA	1 EA	<input type="checkbox"/> Details	0 EA	Remarks	VERIFIED	<a href="#">Drug Info</a>
	Chloride 0.9% 100mL IV	50 mg	100 ml		1 bott		0 bott	1 bott	<input type="checkbox"/> Details	0 bott	Remarks	VERIFIED	<a href="#">Drug Info</a>
	ise 6,000 IU Injection	6000 IU	1 ml	6000 IU/ml, STAT, 1 Days	1 vial	1	0 vial	1 vial	<input type="checkbox"/> Details	0 vial	Remarks	VERIFIED	<a href="#">Drug Info</a>
	Sodium Chloride 0.9%, 50ml IV Solution	6000 IU	1 ml		1 EA		0 EA	1 EA	<input type="checkbox"/> Details	0 EA	Remarks	VERIFIED	<a href="#">Drug Info</a>

Figure 3.2-17 IV Preparation Screen

ALTERNATE DRUG DETAILS								
Location	UNIT FARMASI BEKALAN WAD	Ordered Drug Code	J01GB03183P3003XX					
Dosage Form	Parenteral Solution	Ordered Drug Description	Gentamicin 80mg/2ml Inj					
Route	INF	Alternate Drug Name	Gentamicin 20mg/2ml Inj					
Order Details	80 mg, OD, 1 Days	Alternate Drug Order Qty (Total Order Qty: 0.00)	<input type="text"/>					
BATCH DETAIL								
<input type="button" value="1"/> / 1								
No	Drug Name	Dosage Form	Route	Batch	Expiry Date	Available Qty	Units	Qty to Dispense
No record found								
DILUENT BATCH DETAIL								
Diluent	Sodium Chloride 0.9% 100mL IV soln	Diluent Order Qty (Total Order Qty: 1 bott)	0 bottle					
<input type="button" value="1"/> / 1								
No	Drug Name	Dosage Form	Route	Batch	Expiry Date	Available Qty	Units	Qty to Dispense
1	Sodium Chloride 0.9% 100mL IV soln	Parenteral Solution	INF	DMHPSF14	31/03/2015	9964	bottle	0
Reason	<input type="text"/>		Remark	<input type="text"/>				

Figure 3.2-18 Alternate Drug Details

**Note**

- Alternate drug screen consist of three (3) section which are:
  - Alternate Drug Details**
    - Location, Dosage Form, Route, Order Details, Ordered Drug Code, Ordered Drug Description, Alternate Drug Name and Alternate Drug Order Qty(Total Order Qty: 0.00) will be retrieve from medication order and drug master setup.
    - Select **Alternate Drug Name** from dropdown box.

**b) Batch Details**

- Selected drug name will be listed based on drug master setup.

**c) Diluent Batch Detail**

- Selected drug name will be listed based on drug master setup.
- Select **Diluent** from dropdown box.
- Type **Qty to Dispense**



- Click on the  button to confirm alternate.
- After did alternate, selected drug will be change to green colour as figure 3.2-19.

PRESCRIPTION														Prepare	Worksheet	Label
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info			
Drug Interact	Heparin Sodium 5000 IU/ml Inj Sodium Chloride 0.9% 500mL IV soln	5000 IU		10 IU/ml, Single dose , 1 Days	0 vial 0 bott	1	0 vial 0 bott	1 vial 1 bott		0 vial 0 bott	Remarks	VERIFIED	Drug Info			
	Heparin Sodium 50 IU/5ml Inj Sodium Chloride 0.9% 500mL IV soln		500 ml 500 ml		100 amp 1 bott		1 amp 1 bott		Details							

Figure 3.2-19 Alternate Drug Details

PHARMACY ORDER																
Supervised By																
PRESCRIPTION														Prepare	Worksheet	Label
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info			
Drug	Alteplase 50mg/50ml Powder for Injection (rTPA)	50 mg	50 ml	0.5 mg/ml, Single Dose , 1 Days	1 EA	0	0 EA	1 EA	Details	0 EA	Remarks	VERIFIED	Drug Info			
Alternate Drug	Sodium Chloride 0.9% 100mL IV		100 ml		1 bott		0 bott	1 bott		0 bott						
Intervention	Heparin Sodium 5000 IU Injection	6000 IU	1 ml	6000 IU/ml, STAT , 1 Days	1 vial	1	0 vial	1 vial		0 vial	Remarks	VERIFIED	Drug Info			
Hold Order	Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA		0 EA	1 EA	Details	0 EA						

Figure 3.2-20 IV Preparation

**Note**

**Intervention**

- This function allow user to modify drugs details frequency, duration and form. This function is available in verification screen and preparation screen.
- Right click on the  button and select **Intervention**

**INTERVENTION**

History Confirm Refresh Close

**PHARMACY REMARKS**

[ 1 - 12 / 12 ]

	Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
<input type="checkbox"/>	Authenticity		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Contraindication		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Drug Interaction		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Dose		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Drug		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Duration		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Frequency		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Incompatibility		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Others		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Polypharmacy		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Suggest to Monitor Vital Signs/Lab Result		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Wrong Patient		<input type="radio"/>	<input type="radio"/>

**MODIFY ORDER**

Drug Name	Adrenaline Acid Tartrate 1mg/ml Injection	Dosage Form	Parenteral Solution
Dosage	1 * mg	Admin Route	Intravenous Infusion
Drug Volume	1 * ml	Diluent	Sodium Chloride 0.9% with Dextrose 5% 500mL *
Ordered Concentration	0 mg/ml	Diluent Volume	500 * ml
Frequency	Single Dose *	Total Volume	501 * ml
Infuse Over	0 (Hour) 0 (Minute)	Infusion Rate	0 ml/Min
Duration	1 * Days	End Date	10/10/2019
Start Date	09/10/2019	Update By	
Remarks		Updated Date	09/10/2019

Figure 3.2-21 Intervention

**Note**

Select **Invervention Reason** and enter remarks from the table

- Authenticity
- Contraindication
- Drug Interaction
- Inappropriate Dose
- Inappropriate Drug
- Inappropriate Duration
- Inappropriate Frequency
- Incompatibility
- Others
- Polypharmacy
- Suggest to Monitor Vital Signs/lab Result
- Wrong Patient

**INTERVENTION**

History Confirm Refresh Close

**PHARMACY REMARKS**

[ 1 - 12 / 12 ]

	Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
<input type="checkbox"/>	Authenticity		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Contraindication		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Drug Interaction		<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/>	Inappropriate Dose	Wrong dose	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Drug		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Duration		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Inappropriate Frequency		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Incompatibility		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Others		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Polypharmacy		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Suggest to Monitor Vital Signs/Lab Result		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>	Wrong Patient		<input type="radio"/>	<input type="radio"/>

**MODIFY ORDER**

Drug Name: Adrenaline Acid Tartrate 1mg/ml Injection	Dosage Form: Parenteral Solution
Dosage: 3 * mg	Admin Route: Intravenous Infusion
Drug Volume: 3 * ml	Diluent: Sodium Chloride 0.9% with Dextrose 5% 500mL *
Ordered Concentration: 0.01 mg/ml	Diluent Volume: 500 * ml
Frequency: Single Dose *	Total Volume: 503 * ml
Infuse Over: 0 (Hour) 0 (Minute)	Infusion Rate: 0 ml/Min
Duration: 1 * Days	End Date: 10/10/2019
Start Date: 09/10/2019	Update By: [User Name]
Remarks:	Updated Date: 09/10/2019

Figure 3.2-22 Intervention

**Note**

- Select on **Accepted** radio button
- Pharmacist will select the **Intervention Status** radio button after confirming the intervention status from prescriber.

**CONFIRMATION**



CONF0002: Are you sure you want to save?

Cancel Yes No

Figure 3.2-23 Alert Confirmation Message

- Click on the  button to view intervention history listing.

INTERVENTION REASON HISTORY LISTING			
X			
< < 1 / 1 > >			
Date/Time	Intervention Reason	Remarks	Updated By
09/10/2019 12:24 PM	Inappropriate Dose	Wrong dose	

Figure 3.2-24 Intervention Reason History Listing

PHARMACY ORDER													
Supervised By													
PRESCRIPTION													
Prepare Worksheet Label													
< < 1 / 1 > >													
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug	Alteplase 50mg/50ml Powder for Injection (TPA)	50 mg	50 ml	0.5 mg/ml, Single Dose , 1 Days	1 EA	0	EA	1 EA	Details	0 EA	Remarks	VERIFIED	Drug Info
Alternate Drug	Chloride 0.9% 100mL IV	50 mg	100 ml		1 bott		bott	1 bott		0 bott			
Intervention	se 6,000 IU Injection	6000 IU	1 ml	6000 IU/ml, STAT , 1 Days	1 vial	1	vial	1 vial	Details	0 vial	Remarks	VERIFIED	Drug Info
Interacti	Sodium Chloride 0.9%, 50ml IV Solution	6000 IU	1 ml		1 EA		EA	1 EA		0 EA			

Figure 3.2-25 IV Preparation

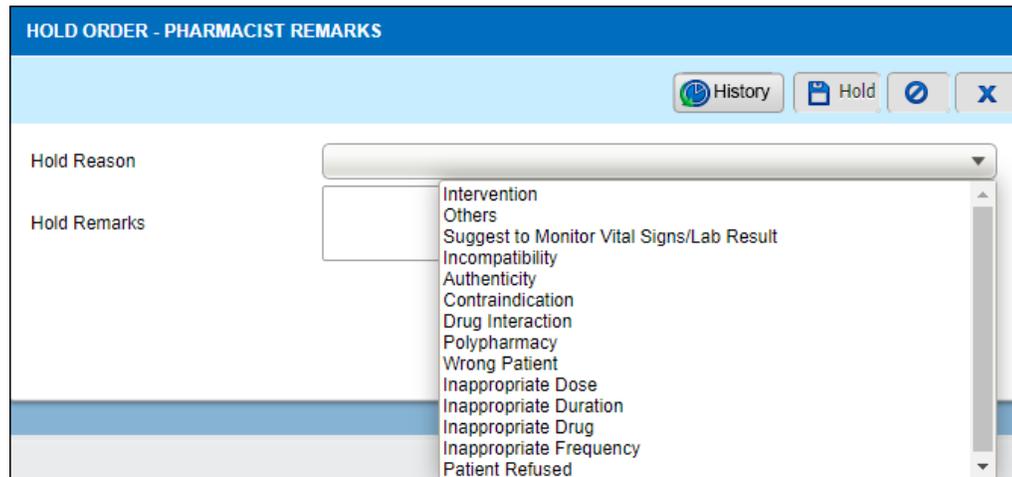
**Note**

**Hold Order**

- These functions allow Pharmacist to hold medication from being prepared or dispense; may resume the medication order to continue dispensing.
- Right click on the ▼ button and select **Hold Order** and new screen will be displayed as per Figure 3.2-27.

HOLD ORDER - PHARMACIST REMARKS	
History Hold X	
Hold Reason	<input type="text"/>
Hold Remarks	<input type="text"/>

Figure 3.2-26 Hold Order-Pharmacist Remarks



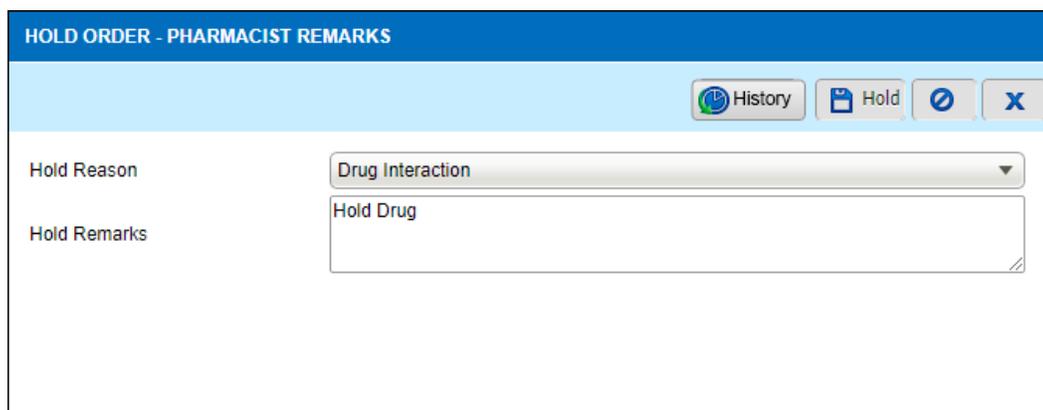
The screenshot shows a window titled "HOLD ORDER - PHARMACIST REMARKS". At the top right, there are buttons for "History", "Hold", a refresh icon, and a close "X" icon. Below the title bar, there are two main input areas: "Hold Reason" and "Hold Remarks". The "Hold Reason" dropdown menu is open, displaying a list of reasons: Intervention, Others, Suggest to Monitor Vital Signs/Lab Result, Incompatibility, Authenticity, Contraindication, Drug Interaction, Polypharmacy, Wrong Patient, Inappropriate Dose, Inappropriate Duration, Inappropriate Drug, Inappropriate Frequency, and Patient Refused.

Figure 3.2-27 Hold Order-Pharmacist Remarks

**Note**

Select **Hold Reason** from drop down box:

- Intervention
- Others
- Suggest to Monitor Vital Signs/Lab Result
- Incompatibility
- Authenticity
- Contraindication
- Drug Interaction
- Polypharmacy
- Wrong Patient
- Inappropriate Dose
- Inappropriate Duration
- Inappropriate Drug
- Inappropriate Frequency
- Patient Refused



The screenshot shows the same "HOLD ORDER - PHARMACIST REMARKS" window. The "Hold Reason" dropdown menu is now closed, and "Drug Interaction" is selected. The "Hold Remarks" text area contains the text "Hold Drug".

Figure 3.2-28 Hold Order-Pharmacist Remarks

**Note**

Click on the  button to proceed hold transaction

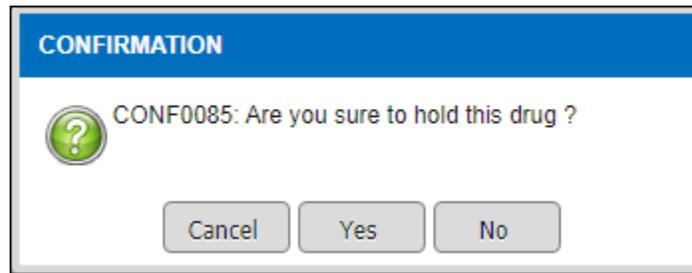


Figure 3.2-29 Alert Confirmation Message

- Click on the  button to confirm the hold order.

**IV PREPARATION**

Print Original Prescription

0 XX XXXX	Mykad	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign

Height 177 cm Weight 77 kg BMI/BSA 24.6 / 1.95 m<sup>2</sup>  (Last Updated : 03/06/2022 ) Nationality : Warganegara

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By

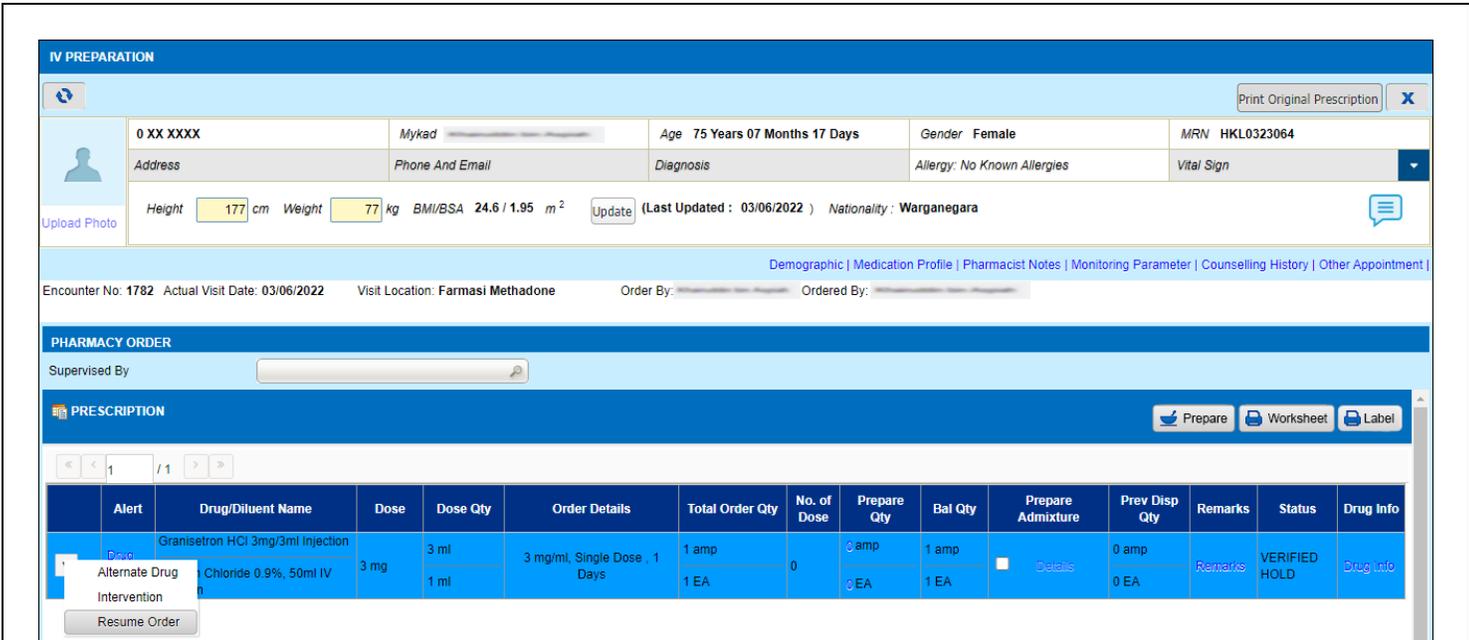
**PRESCRIPTION**

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
<input type="button" value="Drug Interact"/>	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0	0 amp	1 amp	<input type="checkbox"/> Details	0 amp	Remarks	VERIFIED HOLD	<input type="button" value="Drug Info"/>
	Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA		0 EA	1 EA		0 EA			

Figure 3.2-30 IV Preparation

**Note**

- Status will be displayed as **VERIFIED HOLD**.



**IV PREPARATION**

Print Original Prescription X

0 XX XXXX Mykad \_\_\_\_\_ Age 75 Years 07 Months 17 Days Gender Female MRN HKL0323064

Address \_\_\_\_\_ Phone And Email \_\_\_\_\_ Diagnosis \_\_\_\_\_ Allergy: No Known Allergies Vital Sign \_\_\_\_\_

Upload Photo Height 177 cm Weight 77 kg BMI/BSA 24.6 / 1.95 m<sup>2</sup> Update (Last Updated : 03/06/2022 ) Nationality : Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: \_\_\_\_\_ Ordered By: \_\_\_\_\_

**PHARMACY ORDER**

Supervised By \_\_\_\_\_

**PRESCRIPTION** Prepare Worksheet Label

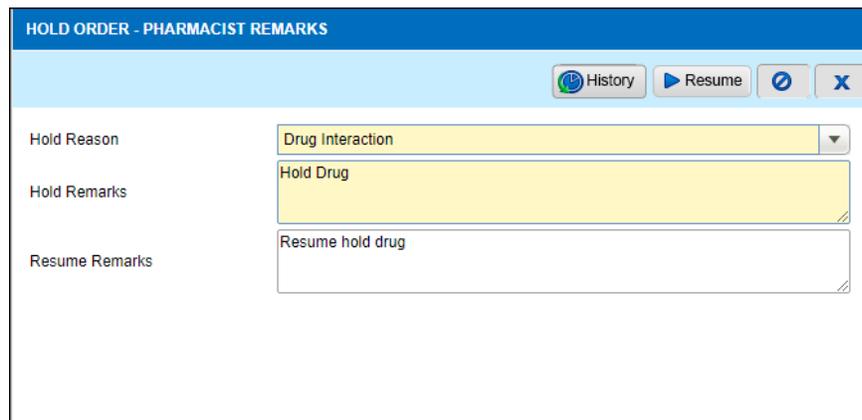
Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
	Gransetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose, 1 Days	1 amp	0	0 amp	1 amp	Details	0 amp	Remarks	VERIFIED	Drug Info
Alert	Chlondine 0.9%, 50ml IV	3 mg	1 ml		1 EA		0 EA	1 EA		0 EA		HOLD	Drug Info

Figure 3.2-31 IV Preparation

**Note**

**Resume Order**

Click on the  button and select **Resume Order**



**HOLD ORDER - PHARMACIST REMARKS**

History Resume

Hold Reason: Drug Interaction

Hold Remarks: Hold Drug

Resume Remarks: Resume hold drug

Figure 3.2-32 Hold Order-Pharmacist Remarks

**Note**

- Click on the  button to resume hold order.
- Enter **Resume Remarks** if required.
- Click on the  button to release drug from hold.

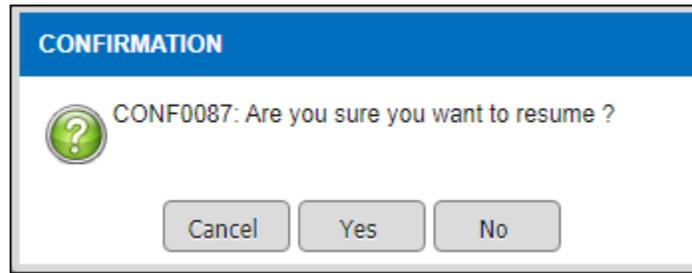


Figure 3.2-33 Alert Confirmation Message

**IV PREPARATION**

Print Original Prescription X

0 XX XXXX Mykad Age 75 Years 07 Months 17 Days Gender Female MRN HKL0323064

Address Phone And Email Diagnosis Allergy: No Known Allergies Vital Sign

Upload Photo Height 177 cm Weight 77 kg BMI/BSA 24.6 / 1.95 m<sup>2</sup> Update (Last Updated : 03/06/2022 ) Nationality : Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment |

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By

**PRESCRIPTION** Prepare Worksheet Label

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug Interact	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0 amp	1 amp	1 EA	<input type="checkbox"/> Details	0 amp	Remarks	VERIFIED	Drug Info
	Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA	0 EA	1 EA	1 EA		0 EA			

Figure 3.2-34 IV Preparation

**STEP 17**

Click on **Prepare Qty** "0" hyperlink to do allocation from displayed window as per figure 3.2-35

**ITEM BATCH DETAILS**

Drug Code A04AA02110P3001XX Default SKU ampoule

Drug Name Granisetron HCl 3mg/3ml Injection Dispense UOM ampoule

Order Details 3 mg, Single Dose , 1 Days

**BATCH DETAIL** [ 1 - 1 / 1 ]

Batch No.	Expiry Date	Available Qty	UOM Qty	Allocate Qty
Q23344	02092027	1000	1	1

Total Location Quantity 1000 Total Allocated Quantity 1

Figure 3.2-35 Item Batch Details

**STEP 18**

Click on selected Batch and enter **Allocate Qty**

**ITEM BATCH DETAILS**

19
📄
🔄
✕

Drug Code: <input type="text" value="A04AA02110P3001XX"/>	Default SKU: <input type="text" value="ampoule"/>
Drug Name: <input type="text" value="Granisetron HCl 3mg/3ml Injection"/>	Dispense UOM: <input type="text" value="ampoule"/>
Order Details: <input type="text" value="3 mg, Single Dose , 1 Days"/>	

**BATCH DETAIL**

[ 1 - 1 / 1 ]

Batch No.	Expiry Date	Available Qty	UOM Qty	Allocate Qty
Q23344	02092027	1000	1	1

Total Location Quantity: 
Total Allocated Quantity:

Figure 3.2-36 Item Batch Details

**STEP 19**

Click on the button to proceed allocation

**CONFIRMATION**

CONF0002: Are you sure you want to save?

20

Figure 3.2-37 Alert Confirmation Message

**STEP 20**

Click on the  button

**IV PREPARATION**

21
🖨️ Print Original Prescription
✕

0 XX XXXX	Mykad	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign

Height  cm Weight  kg BMI/BSA 24.6 / 1.95 m<sup>2</sup> Update (Last Updated : 03/06/2022 ) Nationality: Warganegara

[Demographic](#) | [Medication Profile](#) | [Pharmacist Notes](#) | [Monitoring Parameter](#) | [Counseling History](#) | [Other Appointment](#)

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By:

**PRESCRIPTION**

📄 Prepare
📄 Worksheet
📄 Label

[ 1 - 1 / 1 ]

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
▼	Drug Interact	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0	1 amp	1 amp	0 amp	Remarks	VERIFIED	Drug Info
		Sodium Chloride 0.9%, 50ml IV Solution	1 ml			1 EA	1 EA	1 EA	<input checked="" type="checkbox"/> Details	0 EA			

Figure 3.2-38 IV Preparation

**STEP 21**

Select on the  **Details** checkbox on Prepare Admixture column

**Note**

After select the checkbox pop window will displayed as Figure 3.2-39

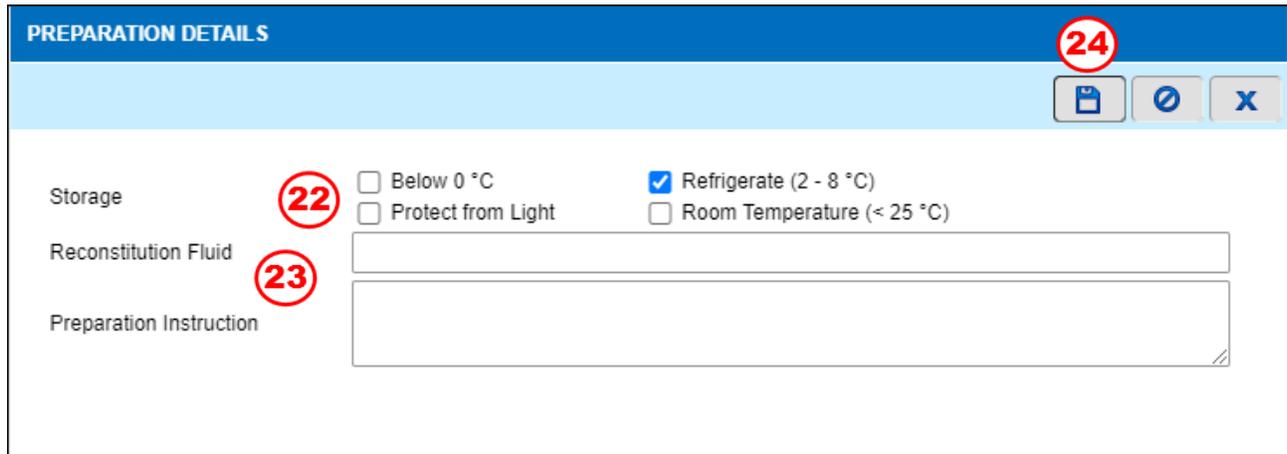


Figure 3.2-39 Preparation Details

**STEP 22**

Select **Storage** checkbox as **Below/ Refrigerate/ Protected from Light or Room Temperature**

**STEP 23**

Enter **Reconstitution Fluid & Preparation Instruction** if applicable

**STEP 24**

Click on the  button to save record

**Note**

- Storage condition and reconstitution fluid will default value as setup in Drug Master (if any).
- Preparation Instruction also can default in Drug Master.

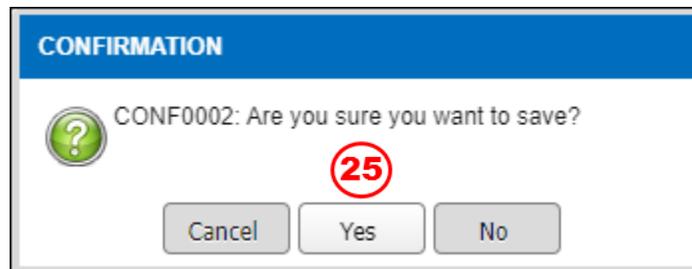
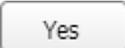


Figure 3.2-40 Alert Confirmation Details

**STEP 25**

Click on  button to proceed worksheet

**IV PREPARATION**

Print Original Prescription X

	0 XX XXXX	Mykad	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
	Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign

Height 177 cm Weight 77 kg BMI/BSA 24.6 / 1.95 m<sup>2</sup> Update (Last Updated : 03/06/2022 ) Nationality : Warganegara 🗨️

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counseling History | Other Appointment |

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By

**PRESCRIPTION** 🔗 Prepare 📄 Worksheet 🏷️ Label

<< < 1 > >> / 1

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug Interactio	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0	1 amp	1 amp	<input checked="" type="checkbox"/> Details	0 amp	Remarks	VERIFIED	Drug Info
	Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA		1 EA	0 EA					

**Figure 3.2-41 IV Preparation**

**STEP 26**

Click on the  **Worksheet** button to view and print

### IV WORKSHEET

MINISTRY OF HEALTH  
HOSPITAL KUALA LUMPUR

**Date of preparation :** 14/02/2023 **Worksheet Id:** 23-02-0001

<b>MRN</b>	HKL0323064	<b>Name</b>	0 XX XXXX
<b>ID No</b>	470627055002	<b>Rx. No.</b>	FMET0001370928
<b>Order Location</b>	Farmasi Methadone	<b>Ordered By</b>	
<b>Order Date</b>	03/06/2022		

No	ROA	Preparation Name	Material Used								Storage
			Ingredient Name	Dose	Dose Volume	No of Dose	Total Qty	Preparation Qty	Batch No	Expiry Date	
1	IVB	Granisetron 3 mg/ml	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	0	0 ml	1 amp	Q23344	02/09/2027	Refrigerate (2 - 8 °C)
			test								
			Sodium Chloride 0.9%, 50ml IV Solution		1 ml			1 EA	P092122	18/04/2025	

**Instruction: Please Refer to SOP best**

**Reference:**

<b>Worksheet generated by</b>	<b>Worksheet &amp; label checked by</b>	<b>Prepared by</b>	<b>Final Product Checked by</b>	<b>Supervised by</b>
<b>Date:</b> 14/02/2023	<b>Date:</b>	<b>Date:</b>	<b>Date:</b>	<b>Date:</b> 14/02/2023

Figure 3.2-42 Sample of IV Worksheet

**IV PREPARATION** Print Original Prescription X

	0 XX XXXX	Mykad	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
	Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign
Upload Photo	Height 177 cm	Weight 77 kg	BMI/BSA 24.6 / 1.95 m <sup>2</sup>	Nationality: Warganegara	

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By

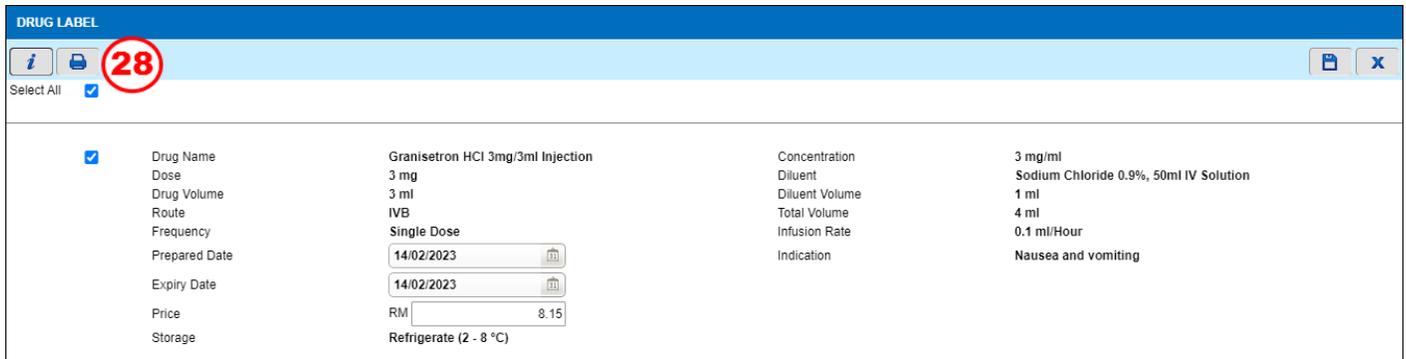
**PRESCRIPTION** Prepare Worksheet Label

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug Interact	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose, 1 Days	1 amp	0	1 amp	1 amp	<input checked="" type="checkbox"/> Details	0 amp	Remarks	VERIFIED	Drug Info
	Sodium Chloride 0.9%, 50ml IV Solution	3 mg	1 ml		1 EA		1 EA	1 EA		0 EA			

Figure 3.2-43 IV Preparation

**STEP 27**

Click on  button and window will displayed as per Figure 3.2.44



<input checked="" type="checkbox"/>	Drug Name	Granisetron HCl 3mg/3ml Injection	Concentration	3 mg/ml
	Dose	3 mg	Diluent	Sodium Chloride 0.9%, 50ml IV Solution
	Drug Volume	3 ml	Diluent Volume	1 ml
	Route	IVB	Total Volume	4 ml
	Frequency	Single Dose	Infusion Rate	0.1 ml/Hour
	Prepared Date	14/02/2023	Indication	Nausea and vomiting
	Expiry Date	14/02/2023		
	Price	RM 8.15		
	Storage	Refrigerate (2 - 8 °C)		

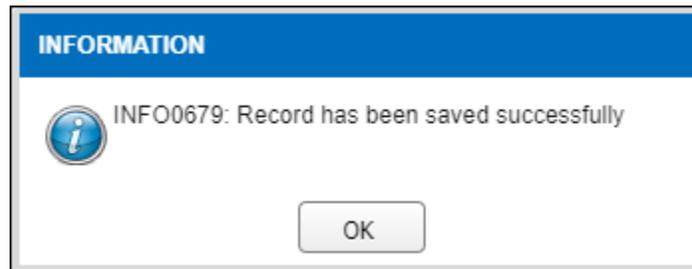
**Figure 3.2-44 Drug Label**

**STEP 28**

Click on the  button to print drug label

**Note**

- Select all  checkbox will allow to print all drug label in the selected prescription.
- **Expiry date** can be default based on diluents in Drug Master.
- Click on the  button to save record.



**Figure 3.2-45 Alert Information Message**

IV Admixture Pharmacy		
HOSPITAL KUALA LUMPUR		
0 XX XXXX		
HKL0323064	Farmasi Methadone	470627055002
Drug Name:	Granisetron HCl 3mg/3ml	Bed No:
Dose:	3 mg / 3 ml (Conc: 3 mg/ml)	
	in 1 ml Sodium Chloride 0.9%, 50ml IV Solution	
Route:	IVB	Freq: Single Dose
		Infuse Rate: 0.1 ml/Hour
Prepared Date:	14/02/2023	Exp Date: 14/02/2023
Indication:	Nausea and vomiting	Price: RM 8.15
Storage:	Refrigerate (2 - 8 °C)	

**Figure 3.2-46 Sample of Drug Label**

**Note**

Sample of IV Admixture Label as per Figure 3.2-47

**IV PREPARATION**

	0 XX XXXX	Mykad 470627055002	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
	Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign

Height  cm Weight  kg BMI/BSA 24.6 / 1.95 m<sup>2</sup>  (Last Updated : 03/06/2022 ) Nationality : Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment |

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Supervised By:

**PRESCRIPTION** 29

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug Interact	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0	1 amp	1 amp	<input checked="" type="checkbox"/> Details	0 amp	Remarks	VERIFIED	Drug Info
	Sodium Chloride 0.9%, 50ml IV Solution	3 mg	1 ml		1 EA		1 EA	1 EA		0 EA			

**Figure 3.2-47 IV Preparation**

**STEP 30**

Click on the button to proceed preparation

**Note**

After allocate quantity **Prepare Qty** column will be retrieve reserved quantity from item batch.

**CONFIRMATION**

CONF0060: Do you want to proceed with the preparation?

30

**Figure 3.2-48 Alert Confirmation Message**

**STEP 31**

Click on the button to proceed dispensing and new screen will be displayed as per Figure 3.2-49

**IV DISPENSING**

	0 XX XXXX	Mykad	Age 75 Years 07 Months 17 Days	Gender Female	MRN HKL0323064
	Address	Phone And Email	Diagnosis	Allergy: No Known Allergies	Vital Sign

Height  cm Weight  kg BMI/BSA 24.6 / 1.95 m<sup>2</sup>  (Last Updated : 03/06/2022 ) Nationality : Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment |

Encounter No: 1782 Actual Visit Date: 03/06/2022 Visit Location: Farmasi Methadone Order By: Ordered By:

**PHARMACY ORDER**

Dispensed To: <input type="text" value="0 XX XXXX"/>	Dispensed Date/Time: <input type="text" value="14/02/2023 12:39"/>	Remarks: <input type="text"/>
Dispensed At: <input type="text" value="Pharmacy Counter"/>	Collected By: <input type="text"/>	
Supervised By: <input type="text"/>		

31

**PRESCRIPTION**

Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
Drug Interact	Granisetron HCl 3mg/3ml Injection	3 mg	3 ml	3 mg/ml, Single Dose , 1 Days	1 amp	0	1 amp	1 amp	<input checked="" type="checkbox"/> Details	0 amp	Remarks	PREPARED	Drug Info
	Sodium Chloride 0.9%, 50ml IV Solution	3 mg	1 ml		1 EA		1 EA	1 EA		0 EA			

**Figure 3.2-49 IV Dispensing**

**STEP 32**

Click on the  button and alert message will be displayed as per Figure 3.2-50

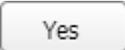
**CONFIRMATION**

 CONF0064: Do you want to dispense now?

32

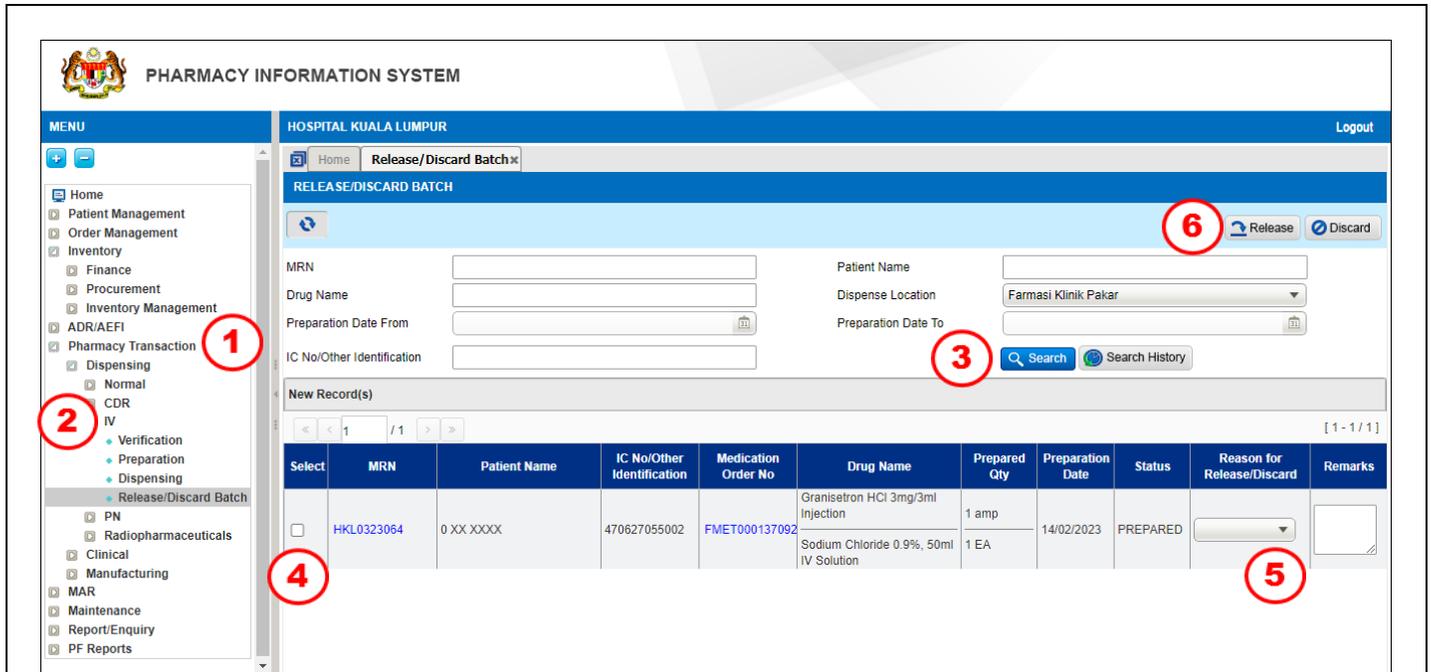
**Figure 3.2-50 Alert Confirmation Message**

**STEP 33**

Click on the  button to dispense

### 3.3 Release / Discard Batch

A function for pharmacist to release/discard the IV admixture that has been prepared back to Preparation stage. When release batch, drug and diluents quantity will be returned back to inventory. When discard batch, drug and diluents quantity will be deducted from inventory.



The screenshot shows the 'RELEASE/DISCARD BATCH' screen in the PHARMACY INFORMATION SYSTEM. The interface includes a menu on the left, search filters at the top, and a table of records below. Red circles 1-6 highlight key elements: 1. 'Dispensing' menu item, 2. 'IV' sub-menu, 3. Search button, 4. Table header, 5. Reason for Release/Discard dropdown, 6. Release/Discard buttons.

Figure 3.3-1 IV Dispensing: Release/Discard

#### STEP 1

Click on '**Pharmacy Transaction**' menu follow **by** '**Dispensing**' and select '**IV**' sub-menu

#### Note

- Various search criteria as provided as below:

No	Field	Description	Remark
a)	MRN	Patient Medical Record Number	Search option: <ul style="list-style-type: none"> <li>• Type the MRN either full or partial: <i>Example : HPSF00001234 or "1234"</i></li> </ul>
b)	Patient Name	Patient Name	Allow to search by patient full name or partial
c)	Drug Name	Drug Name	Allow to search by active ingredient
d)	Dispense Location	Patient visit location	Able to filter and search patient by visit location and prescriber's location.
e)	Prepare Date From	Prepare Date From	Able to filter and search prepare date from
f)	Prepare Date To	Prepare Date To	Able to filter and search prepare date to
g)	IC No/Other Identification	IC Number/Other Identification	Able to filter by IC number or other identification

Table 3.3.1

### **Note**

Search result of patient record list will be displayed:

- Select
- MRN
- Patient Name
- Drug Name
- Medication Order No
- Prescription Date
- Prepared Qty
- Status
- Reason For Release / Discard

### **STEP 2**

Click on '**Release/Discard Batch**' sub-menu

### **Note**

Various search criteria is provided as below :

- a) **MRN**
- b) **Patient Name**
- c) **Drug Name**
- d) **Dispense Location**
- e) **Prepare Date From**
- f) **Prepare Date To**
- g) **IC No/Other Identification**

### **STEP 3**

Click on the  button

### **STEP 4**

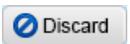
Select  checkbox to discard from the listed drug

### **STEP 5**

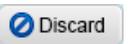
Select Reason for Discard from dropdown box. Select either one of these from discard reason drop down menu: -

- Uncollected
- Wrong Allocation
- Change of Regimen
- Patient Refused
- Intervention
- Faulty Product

### **STEP 6**

Click on the  or  button to proceed.

### **Note**

-  : System will reset back the allocation quantity but no stock will deduct
-  : Allocation will discard and stock will be deducted
- Once drug already released or discarded, drug will be displayed back in Preparation screen for re-allocation of new batch qty.

## 4.0 Acronyms

Abbreviation	Definition
MOH	Ministry Of Health
PhIS	Pharmacy Information System
CPS	Clinical Pharmacy System
MRN	Medical Record Number
IV	Intravenous
HQ	Headquarters
INJ	Injection
QTY	Quantity
LAB	Laboratory

## 5.0 Links to Clinical Modules

No	Module	PDF Links	No	Module	PDF Links
1	<i>Inpatient</i>	<a href="#">Click Here</a>	12	<i>CDR Dispensing</i>	<a href="#">Click Here</a>
2	<i>CDR Order</i>	<a href="#">Click Here</a>	13	<i>Methadone Dispensing</i>	<a href="#">Click Here</a>
3	<i>TDM Order</i>	<a href="#">Click Here</a>	14	<i>PN Dispensing</i>	<a href="#">Click Here</a>
4	<i>PN Order</i>	<a href="#">Click Here</a>	15	<i>Order Management</i>	<a href="#">Click Here</a>
5	<i>IV Order</i>	<a href="#">Click Here</a>	16	<i>Patient Management</i>	<a href="#">Click Here</a>
6	<i>Prepacking</i>	<a href="#">Click Here</a>	17	<i>Radiopharmaceutical</i>	<a href="#">Click Here</a>
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8	<i>MTAC</i>	<a href="#">Click Here</a>	19	<i>Special Drug Request</i>	<a href="#">Click Here</a>
9	<i>ADR &amp; DAC</i>	<a href="#">Click Here</a>	20	<i>MAR</i>	<a href="#">Click Here</a>
10	<i>Medication Counselling</i>	<a href="#">Click Here</a>	21	<i>DICE</i>	<a href="#">Click Here</a>
11	<i>Ward Pharmacy</i>	<a href="#">Click Here</a>	22		