



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

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## **User Manual Inpatient Pharmacy**

|                    |                                       |
|--------------------|---------------------------------------|
| <b>Version</b>     | <b>: 11<sup>th</sup> Edition</b>      |
| <b>Document ID</b> | <b>: U. MANUAL_INPATIENT PHARMACY</b> |



PhIS & CPS Project  
User Manual – Inpatient Pharmacy



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Application reference: PhIS & CPS v2.3.1



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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 would 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 Inpatient Pharmacy sub-module and its key features and functionalities. The primary objective is to help guide user through the process of completing PhIS application process. User will understand the following activities in details:

- Screening & Verification
- Preparation
- Dispensing
- Fill List
- Inpatient Partial Supply
- Released / Discard Batch
- Medication Return
- Re-Dispensing

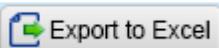
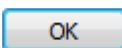
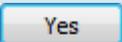
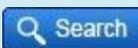
### 1.3 Organised Sections

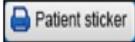
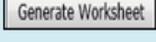
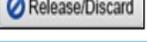
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Inpatient Pharmacy
- 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                             |  |                                    |

| Inpatient Module Legend   |                                    |   |                             |   |                          |
|---|------------------------------------|---|-----------------------------|---|--------------------------|
|  | Update Patient's Height and Weight |  | Print Ingredient Label      |  | Fill List                |
|  | Patient Sticker                    |  | Dispense                    |  | Label                    |
|  | Preparation                        |  | Print Original Prescription |  | Worksheet                |
|  | Edit Label                         |  | Verify                      |  | Manage Fill List         |
|  | Generate Worksheet                 |  | Confirm                     |  | Balance Medication Sheet |
|  | Invoice                            |  | Release/Discard             |  | Collapse All Fill List   |
|  | Previous/Next record               |  | Re-Dispense                 |  | Expand All Fill List     |

**Note**

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



## 2.2 Latest Enhancement and Updates

| Changes  | Page  |
|--|-------|
| Preparation- PCI button in preparation stage available         | 25    |
| Intervention by doctors and pharmacist separated               | 12    |
| psychotropic drug cannot be selected to perform re-dispensing  | 67    |
| Supply date from and to for fill list auto generated by system | 52    |
| Label printing available in IP and OP format                   | 57-58 |
| Fill list generate have prepared by and checked by name        | 59    |
| Medication return reason updated screen                        | 62    |
| FPP Medication summary added                                   | 67    |
| Changed screenshot for dispensing module                       | 40-49 |
| Added notes for Label  | 30    |
| Added Advance search by recorded by                            | 7-49  |
| Screenshot for preparation screen                              | 23-37 |
| Added notes for re-dispensing                                  | 68    |

## 3.0 Inpatient Pharmacy

### Overview

The Inpatient Pharmacy module include Implementing safe, organized, and efficient drug-dispensing system is essential for controlling costs and assuring that the medical prescription is safely followed as requested within the appropriate deadline. An appropriate dispensing system is an important ally for the prevention or reduction by medication errors by helping to minimize dispensing error opportunities in a pharmacy. At present there are various types of dispensing systems for medical prescription within a hospital.

### User Group

This module is intended for pharmacist (subject to the user assigned by the facility)

### Functional Diagram

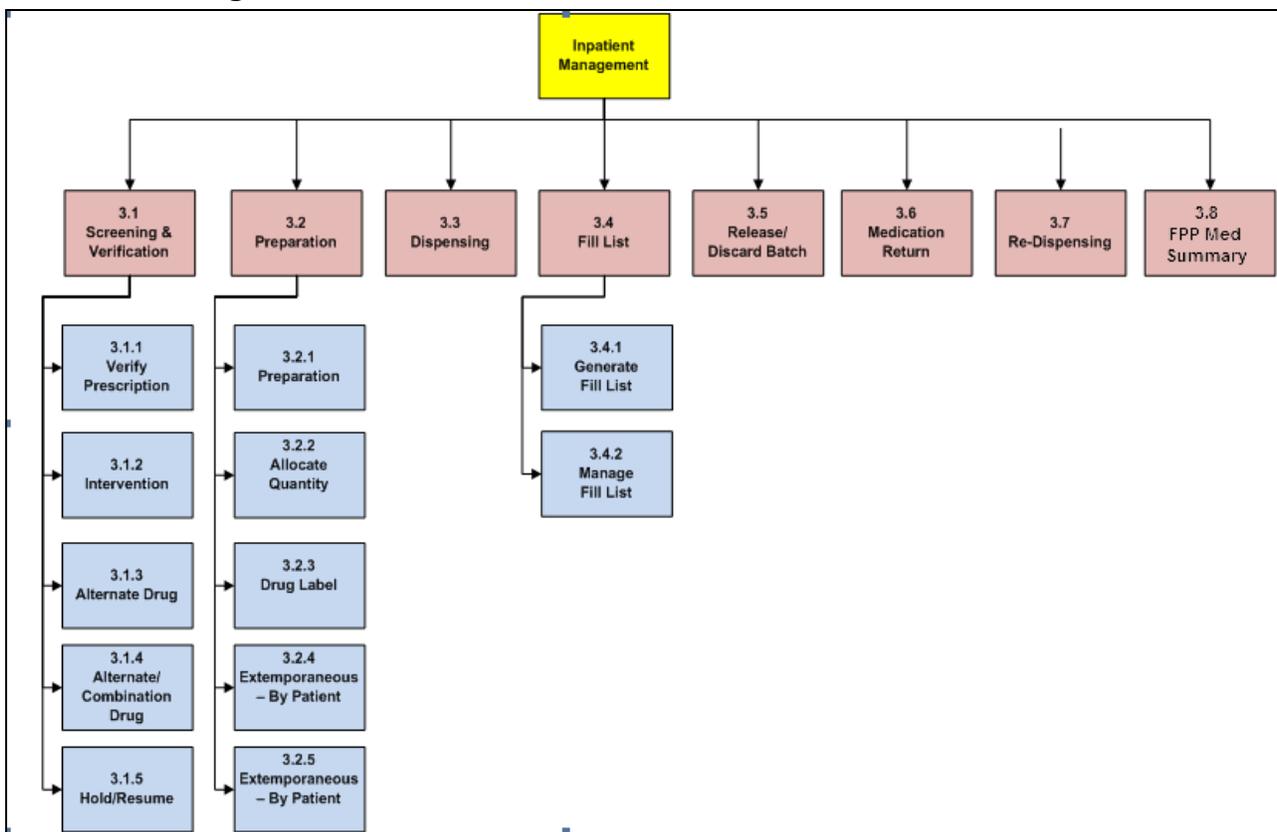


Figure 3.0-1



## Functional Description

Inpatient Pharmacy comprises of seven (7) main functions:

- **Screening & Verification**

Screening and verification is for the pharmacist to verify the prescriptions received from order management. This process is mandatory for all prescriptions receive before the user can proceed with dispensing preparation. There are also safety systems that warn against toxic doses, allergic and cross-reactions, drug interactions, duplication of therapeutic classes, contraindications, and adverse effects.

- **Preparation**

The prescription and the drug preparation are made in the system that may integrated with inventory system. Professionals access system data directly with no need to send files or manual drug labeling.

- **Dispensing**

The prescription and the dispensing report are made in the system that integrated with inventory system

- **Fill List**

User is allowed to make unit dose dispensing for a selected nursing unit's entire list of patients of medication orders as a batch process. The dispensing process like preparation and dispensing will be done from the same screen for an entire list of patient from a selected nursing unit.

- **Release / Discard Batch**

Allow the user to release the drug reserved for the patient back into inventory. This list will a contain list of drugs with 'Uncollected', 'Prepared' or 'Hold' status. User need to release this drug in order for it to be available in the drug inventory list. The status of allocated (reserved quantity) will change to available quantity.

- **Medication Return**

Allow the user to return any unused drugs back to inventory. This screen will allow the user to Create New Record and Confirm Online Request. 'Confirm Online Request' is used to manage medication return requests made by nurses for medication returned for all unused medication from inpatient upon the patient's discharge.

- **Re-Dispensing**

Allow the user to re-issue medication to the patient due to spilled, broken or lost. Only Authorized users will be able to access this process.

- **FPP Medication Summary**

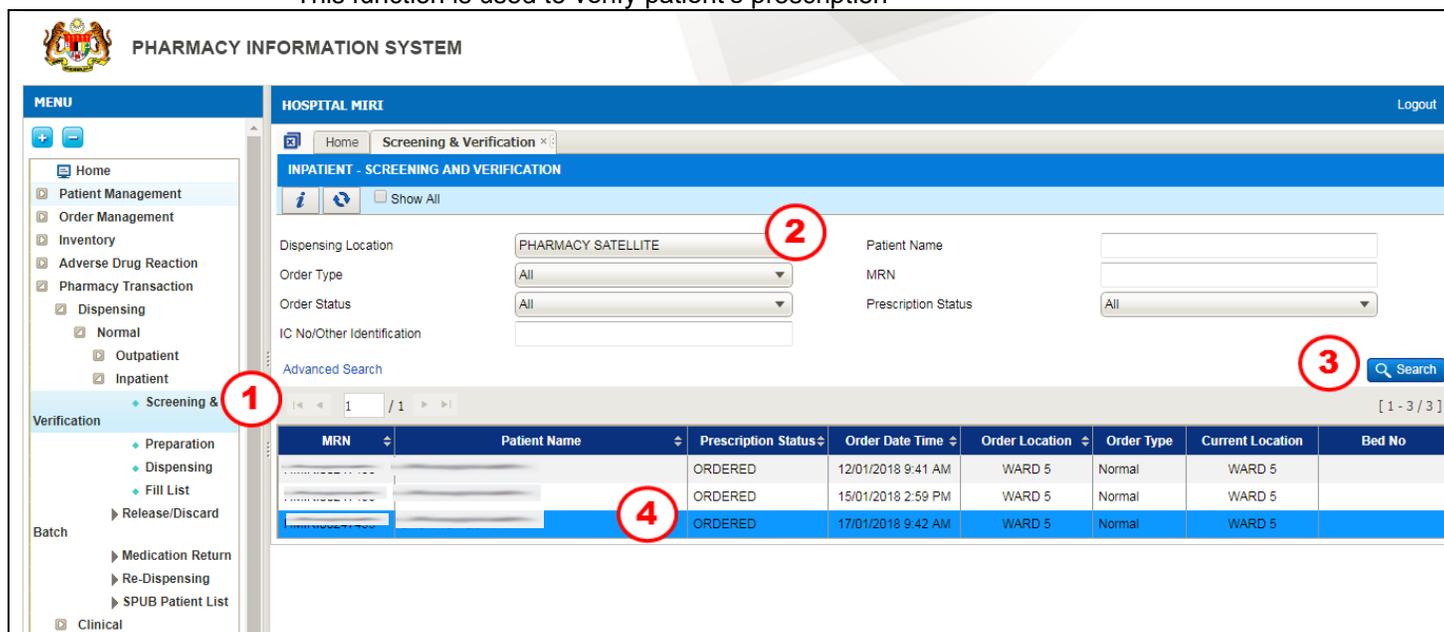
Allow user to view Full Paying Patients details and update FPP supply for patient. User able to print Invoice for the finalized FPP Medication summary.

### 3.1 Screening & Verification

This function is used to screen & verify prescription before preparation and dispensing stage

#### 3.1.1 Verify Prescription

This function is used to verify patient's prescription



**PHARMACY INFORMATION SYSTEM**

**HOSPITAL MIRI** Logout

Home | Screening & Verification

**INPATIENT - SCREENING AND VERIFICATION**

Show All

Dispensing Location: PHARMACY SATELLITE (2)

Order Type: All

Order Status: All

IC No/Other Identification:

Patient Name:

MRN:

Prescription Status: All

Advanced Search (3) Search

1 << 1 / 1 >>

| MRN | Patient Name | Prescription Status | Order Date Time    | Order Location | Order Type | Current Location | Bed No |
|-----|--------------|---------------------|--------------------|----------------|------------|------------------|--------|
|     |              | ORDERED             | 12/01/2018 9:41 AM | WARD 5         | Normal     | WARD 5           |        |
|     |              | ORDERED             | 15/01/2018 2:59 PM | WARD 5         | Normal     | WARD 5           |        |
|     |              | ORDERED             | 17/01/2018 9:42 AM | WARD 5         | Normal     | WARD 5           |        |

(4) points to the third row in the table above.

Figure 3.1.1-1 Screening & Verification Listing Page

**Note**

PhIS Screen menu/sub menu will be displayed according to user access right

**STEP 1**

Click on 'Screening & Verification' menu

**STEP 2**

Select **Dispensing Location**

**STEP 3**

Click on the  button to search the patient:

| Basic Search |                     |  |  |
|--------------|---------------------|--|--|
| No           | Field               | Description  | Remark   |
| a            | Show All            |  | Able to view all patient record  |
| b            | Dispensing Location | Dispensing location. (It will list down all active location) | Able to filter and search patient name by dispensing location  |
| c            | Patient Name        | Patient Name   | Allow to search by full or partial patient's name  |
| d            | Order Type          | -All<br>-Normal<br>-SPUB                                     | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br>Normal – Prescription from normal order |

|                       |                     |   |  |
|-----------------------|---------------------|---|--|
|                       |                     | -Discharge<br>-Referred Patient   | SPUB - Prescription from SPUB order<br>Discharge - Prescription from Discharge order<br>Referred Patient – Prescription from referred patient  |
| e                     | MRN                 | Patient MRN   | Allow to search by patient full or partial MRN No  |
| f                     | Prescription Status | -All<br>-Hold(Drug)<br>-In Progress<br>-Partially Dispensed<br>-Dispensed<br>-Expired(Drug) | All - filter all prescription status<br>Hold (Drug) - filter record with prescription status in 'In Progress/Hold'. Drug Status in (Verified Hold/ Prepared Hold/ Ordered Hold).<br>In Progress – filter all prescription status with 'In Progress' status<br>Partially Dispensed – filter all prescription status with 'Partially Dispensed' status<br>Dispensed – filter all prescription status with 'Dispensed' status<br>Expired (Drug) – filter record prescription with some drug status in (Dispensed/Discontinue/Expired/Stop). Prescription with active and non-active drugs will be displayed. However, if all drugs are expired/not active, prescription will be displayed until midnight on the day of expiry date. Record will be removed from the list after scheduler run on midnight. |
| g                     | Order Status        | -All<br>-New Order<br>-Partial Supply<br>-Pending Authorisation                             | All – Type of search from range New order, Partial Supply and Pending Authorisation<br>New Order – Prescription of new order<br>Partial Supply – Prescription from partially dispense<br>Pending Authorisation – Prescription contain of drug to authorise   |
| <b>Advance Search</b> |                     |   |  |
| g                     | Order Location      | Order location. (It will list down all active location)                                     |  |
| h                     | Order Location Type | -All<br>-Clinic<br>-Day Care<br>-ER<br>-Nursing Unit<br>-Pharmacy                           |  |
| i                     | Order Date From     |   | Start point for range of order date  |
| j                     | Order Date To       |   | Order Date To can be NULL or must be greater than the value for Order Date From  |
| k                     | Bed                 |   | Search patient by bed number   |
| l                     | Recorded By         |   | Search by Recorded by name   |

**Table 3.1.1**

**Note**

Advanced Search can be used to narrow down the criteria. Consist of:

- a) Order Location
- b) Order Location Type

- c) Order Date From
- d) Order Date To
- e) Bed No

**STEP 4**

Click on existing patient record as follow.

| Drug Name                           | Order Details  | Order Qty         | Reserve Qty   | POMs Received     | Dispense UOM Qty | Balance              | Remarks  | Counselling Indication          | Extemporaneous |
|-------------------------------------|--|-------------------|---|-------------------|------------------|----------------------|----------|---------------------------------|----------------|
| Paracetamol 500 mg Tablet           | 1000 mg, PRN4, Oral, 4 Days<br>08/10/2019 02:37 PM - 12/10/2019 02:37 PM | 32 tablet         | 0 <input type="checkbox"/> POMS                                 | 0 tablet <b>5</b> | 0 tablet         | 32 tablet (4 day(s)) | Remarks  | <input type="checkbox"/> Detail |                |
| Simvastatin 10 mg Tablet            | 7 mg, ON, Oral, 4 Days<br>08/10/2019 02:38 PM - 12/10/2019 02:38 PM      | 3 tablet          | 0 <input type="checkbox"/> POMS<br><a href="#">Alternate(C)</a> | 0 tablet          | 0 tablet         | 3 tablet (4 day(s))  | ▶Remarks | <input type="checkbox"/> Detail |                |
| Clopidogrel 75 mg Tablet            | 75 mg, OM, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM     | 4 tablet <b>6</b> | <input checked="" type="checkbox"/> POMS                        | 0 tablet          | 0 tablet         | 4 tablet (4 day(s))  | Remarks  | <input type="checkbox"/> Detail |                |
| Chlorpheniramine Maleate 4mg Tablet | 4 mg, ON, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM      | 4 tablet          | 0 <input type="checkbox"/> POMS<br><a href="#">Alternate</a>    | 0 tablet          | 0 tablet         | 4 tablet (4 day(s))  | Remarks  | <input type="checkbox"/> Detail |                |

**Figure 3.1.1-2 Screening & Verification**

**STEP 5**

Click at POM Received and pop up will appear as in Figure 3.1.1-3

**Figure 3.1.1-3 POM Received Quantity and Label Printing**

**Note**

- Key in quantity received and click button and button to print label.
- Label will appear as in Figure 3.1.1-4

|   |                     |
|---|---------------------|
| HOSPITAL KUALA LUMPUR (Tel: 0326155555)   |                     |
| <b>PATIENT'S OWN MEDICINES (POMs)</b>   |                     |
| <br>HKL00235253      Farmasi Pesakit Dalam  |                     |
| <b>Chlorpheniramine Maleate 4mg Tablet</b>  |                     |
| Ambil 1 biji Setiap malam   |                     |
| -   |                     |
| Boleh diambil SEBELUM ATAU SELEPAS makan. Menyebabkan mengantuk. Elak memandu /kendali mesin.   |                     |
| 08/10/2019  | Kuantiti 4 biji     |
| UBAT TERKAWAL   | 08/10/2019 03:46 PM |

Figure 3.1.1-4 POM Label

**STEP 6**

Uncheck the POM checkbox and pop up as Figure 3.1.1-5 will appear to confirm

**Note**

If user wants to update POMs drug to Normal drug, Untick the POM checkbox and drug will be changed from own medication to normal medication.

**CONFIRMATION**

 CONF7280: Do you want to update this POMS flag?

7

Figure 3.1.1-5 Confirmation

**STEP 7**

Click  button to confirm POM changes

**Note**

System will change the POM to normal drug as in Figure 3.1.1-6

| Drug Name                           | Order Detail   | Order Qty | Prev Disp Qty | Reserve Qty                                   | POMs Received | Dispense UOM Qty | Balance              | Remarks | Drug Counselling                | Extemporaneous |
|-------------------------------------|--|-----------|---------------|---|---------------|------------------|----------------------|---------|---------------------------------|----------------|
| Paracetamol 500 mg Tablet           | 1000 mg, PRN4, Oral, 4 Days<br>08/10/2019 02:37 PM - 12/10/2019 02:37 PM | 32 tablet | 0 tablet      | <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 32 tablet (4 day(s)) | Remarks | <input type="checkbox"/> Detail | Dr. Rosni Yahy |
| Simvastatin 10 mg Tablet            | 7 mg, ON, Oral, 4 Days<br>08/10/2019 02:38 PM - 12/10/2019 02:38 PM      | 3 tablet  | 0 tablet      | <input type="checkbox"/> POMs<br>Alternate(C) | 0 tablet      | 0 tablet         | 3 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail | Dr. Rosni Yahy |
| Clopidogrel 75 mg Tablet            | 75 mg, OM, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM     | 4 tablet  | 0 tablet      | <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 4 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail | Dr. Rosni Yahy |
| Chlorpheniramine Maleate 4mg Tablet | 4 mg, ON, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM      | 4 tablet  | 0 tablet      | <input type="checkbox"/> POMs<br>Alternate    | 0 tablet      | 0 tablet         | 4 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail | Dr. Rosni Yahy |

## STEP 8

Click on the  button to proceed verification process

### **Note**

- *When selected patient name is clicked, the summary of patient information will be displayed in the patient banner. The patient banner will be displayed at the specific screen which is required patient information. Below is the list of patient information:*
  - *Patient Name*
  - *Patient Address*
  - *Patient IC Number*
  - *Patient Phone and Email*
  - *Patient Diagnosis*
  - *Patient Age*
  - *Patient Allergy*
  - *Patient Gender*
  - *Patient MRN*
- *Below options are provided for user to view the additional patient information. Click on the hyperlink as below:*
  - **Lab Parameter**
    - *Patient's laboratory test results.*
  - **Counselling History**
    - *Medication counselling history records.*
  - **Demographic**
    - *Patient's demographic details.*
  - **Pharmacist Notes**
    - *Pharmacy notes such as MTAC, Ward Pharmacy and etc.*
  - **Medication Profile**
    - *This hyperlink will show the patient's current medication and previous medication history.*
  - **Other Appointments**
    - *This screen provides information if there are any other appointments recorded for the patient.*
- *Current visit information will be displayed as below:*
  - *Admission Date*
  - *Attending practitioner*
  - *Visit location*
  - *Room No / Bed No*
  - *Rx No*
- *Prescription from order management will be displayed as below:*
  - *Drug Name*
  - *Order Detail*
  - *Order Qty - Quantity of drug ordered by the prescriber.*
  - *Reserve Qty*
  - *Dispense OUM Quantity*
  - *Balance*
  - *Remarks*
  - *Drug Counselling*
  - *Previous Dispense Quantity*

- *Extemporaneous*
- *Prescriber name*
- *Status*
- *To skip preparation screen, tick on the Proceed to Preparation  checkbox.*
- *Select ENGLISH  check box to print in English language.*

**Note**

- Once the button  is clicked, system will automatically calculated the quantity in **Reserve Qty** field base on quantity in *Supply Duration* field.
- A notification icon  in the Remarks column is display if there are past Remarks in all dispensing screens. User will be able to view past Remarks (with timestamp & NAME OF PERSON making remark), including the doctor's remark as per Figure 3.1.1-3.
- *MTAC History link in all dispensing screen (patient banner).*

**PHARMACIST REMARK**

📄 ⌛ ✕

✕

Prescriber Remark

Order Stage 📄

Doctor Remark at Order Stage

Pharmacist Remark \* Drug authorisation is required. Please enter remarks to proceed with verification

Verification Stage 📄

**DRUG REMARKS HISTORY (ACETYLSALICYLIC ACID 100 MG, GLYCINE 45 MG TABLET)**

| Prescriber Remark            | Prescriber Name | Start Date | End Date   | Pharmacist Remark                      | Stage        | Rx           |
|------------------------------|-----------------|------------|------------|--|--------------|--------------|
| Doctor Remark at Order Stage | in              | 26/07/2017 | 28/07/2017 | Pharmacist Remark at Screening Stage   | Verification | 100000876420 |
|                              |                 |            |            | Pharmacist Remark at Preparation Stage | Preparation  | 100000876420 |
|                              |                 |            |            | Pharmacist Remark at Dispensing Stage  | Dispensing   | 100000876420 |

**Figure 3.1.1-3 Pharmacist Remark**

### 3.1.2 Intervention

This function allow user to modify drugs details frequency, duration and form. This function is available in screening verification screen and preparation screen however the suitable time to do intervention is during screening and verification screen



|                                     | Drug Name                           | Order Detail   | Order Qty | Prev Disp Qty | Reserve Qty   | POMS Received | Dispense UOM Qty | Balance              | Remarks | Drug Counselling                | Extemporaneous                  | Prescrib Name |
|-------------------------------------|-------------------------------------|--|-----------|---------------|---|---------------|------------------|----------------------|---------|---------------------------------|---------------------------------|---------------|
| <input type="checkbox"/>            | Paracetamol 500 mg Tablet           | 1000 mg, PRN4, Oral, 4 Days<br>08/10/2019 02:37 PM - 12/10/2019 02:37 PM | 32 tablet | 0 tablet      | 0 <input type="checkbox"/> POMS                                 | 0 tablet      | 0 tablet         | 32 tablet (4 day(s)) | Remarks | <input type="checkbox"/> Detail |                                 |               |
| <input checked="" type="checkbox"/> | Simvastatin 10 mg Tablet            | 7 mg, ON, Oral, 4 Days<br>08/10/2019 02:38 PM - 12/10/2019 02:38 PM      | 3 tablet  | 0 tablet      | 0 <input type="checkbox"/> POMS<br><a href="#">Alternate(C)</a> | 0 tablet      | 0 tablet         | 3 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail |                                 |               |
| <input checked="" type="checkbox"/> | Clopidogrel 75 mg Tablet            | 75 mg, OM, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM     | 4 tablet  | 0 tablet      | 0 <input type="checkbox"/> POMS                                 | 0 tablet      | 0 tablet         | 4 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail | <input type="checkbox"/> Detail |               |
| <input type="checkbox"/>            | Chlorpheniramine Maleate 4mg Tablet | 4 mg, ON, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM      | 4 tablet  | 0 tablet      | 0 <input checked="" type="checkbox"/> POMS                      | 4 tablet      | 0 tablet         | 4 tablet (4 day(s))  | Remarks | <input type="checkbox"/> Detail |                                 |               |

Figure 3.1.2-1 Screening & Verification - Intervention

**Note**

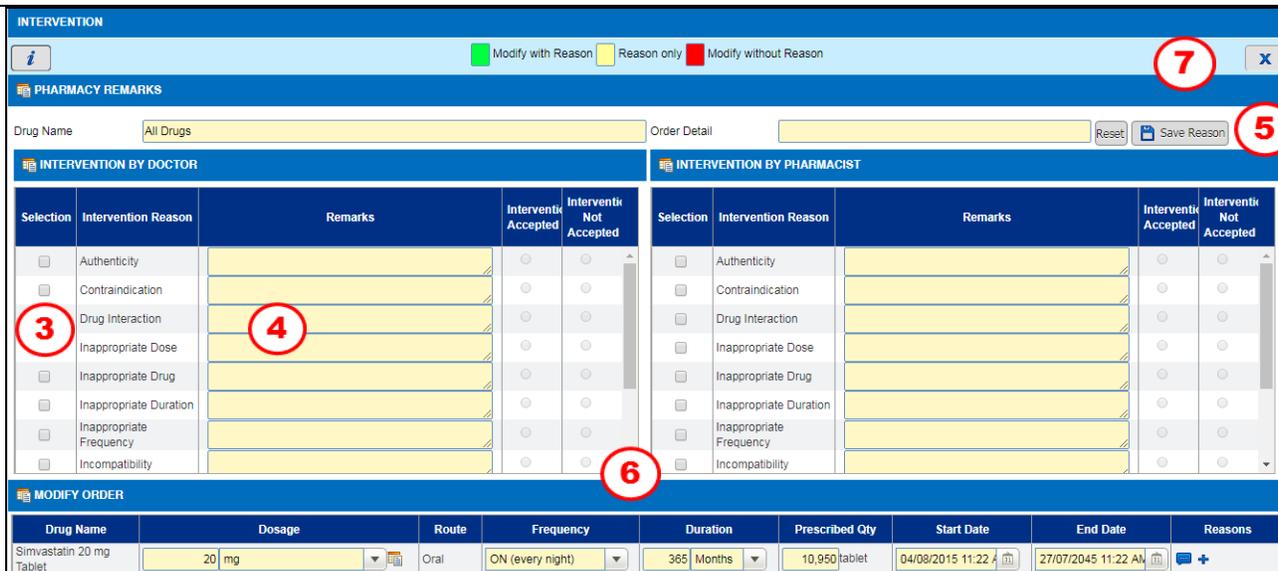
Repeat Step 1 to Step 5 as in verify prescription as per Figure 3.1.1-1 before perform Intervention steps.

**STEP 1**

Click on the  checkbox as per Figure 3.1-2-1

**STEP 2**

Click on intervention  button for Intervention as per Figure 3.1-2-1



| Selection                | 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"/>     |

| Drug Name                | Dosage | Route | Frequency        | Duration   | Prescribed Qty | Start Date          | End Date            | Reasons |
|--------------------------|--------|-------|------------------|------------|----------------|---------------------|---------------------|---------|
| Simvastatin 20 mg Tablet | 20 mg  | Oral  | ON (every night) | 365 Months | 10,950 tablet  | 04/08/2015 11:22 AM | 27/07/2045 11:22 AM |         |

Figure 3.1.2-2 Intervention

### STEP 3

Choose the **Intervention Reason** by tick at the checkbox of the column **Selection**:

- Authenticity
- Contraindication
- Drug Interaction
- Inappropriate Dose
- Inappropriate Drug
- Inappropriate Duration

### STEP 4

Enter remarks of intervention reason.

### STEP 5

Click on the  to save the intervention reason. Once do that, the drugs information will be change from grey to yellow.

### Note

- Intervention reason will be updated to all drugs listed in the screen.
- Background color for the drugs change from grey to Yellow, means the records is being updated on the intervention reason but no modification been done.
  - There were also some color indicator highlighted for a drug row, when user do the intervention:
    - GREEN**- Modify with Intervention Reason:- user able to save changes.
    - YELLOW**- Add Reason only:- user able to save changes.
    - RED**-Modify without Reason:- user are not able to save changes. User need to add in at least one reason to save changes.

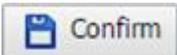
## STEP 6

Modify the order detail and background color will change to green.

### Note

- User is allowed to change only Frequency, Duration and Dose
- Modify Order will be displayed:
  - b) Drug name.
  - c) Dose – dosage will be allowed to change.
  - d) Frequency - dosage will be a drop down and allowed to change - once changed the changed value of the dose will be stored and the order quantity will be recalculated.
  - e) Order Qty - dosage will be allowed to change - value of the Order Qty will be recalculated after change the frequency and duration.
  
  - f) Start Date Time.
  - g) Dosage form.
  - h) Admin Route.
  - i) Admin Route.
  - i) Duration - duration is allowed to change. The user will also have to select the UOM for duration, possible UOM will be days, month and hours.
  - j) Dispense Location.
  - k) End Date Time.
  - l) Remarks.

## STEP 7

Click on Confirm  button to save the modification as refer to Figure 3.1.2-2.

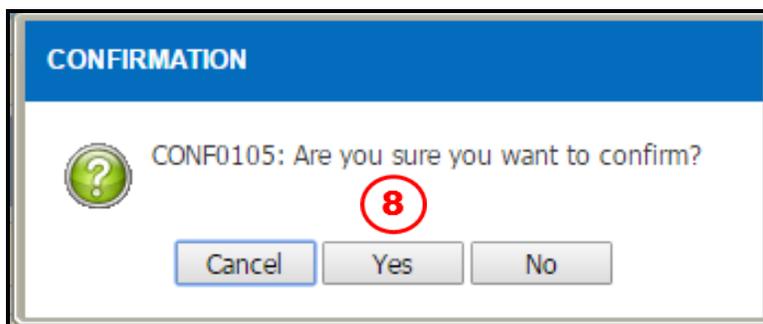


Figure 3.1.2-5 Confirmation

## STEP 8

Click on  to confirm drug intervention.

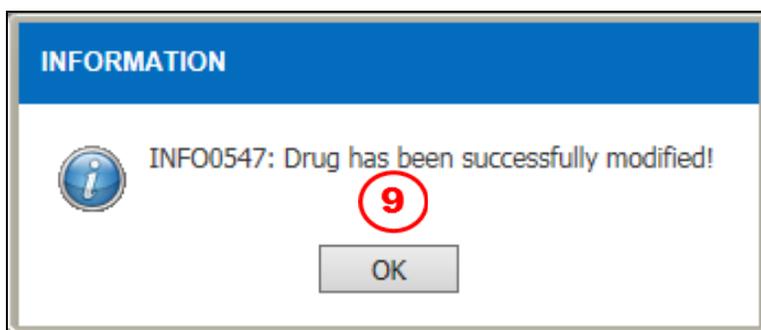
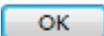


Figure 3.1.2-6 Information Alert Message

**STEP 9**

Click on the  button to save record

| PRESCRIPTION             |   |  |             |               |   |               |                  |                        |         |  |                |             |
|--------------------------|---|--|-------------|---------------|---|---------------|------------------|------------------------|---------|--|----------------|-------------|
|                          | Drug Name                                   | Order Detail   | Order Qty   | Prev Disp Qty | Reserve Qty   | POMs Received | Dispense UOM Qty | Balance                | Remarks | Drug Counselling                           | Extemporaneous | Prescri Nam |
| <input type="checkbox"/> | Atorvastatin 20 mg Tablet                   | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                                 | 0 tablet      | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/> | Simvastatin 10 mg Tablet                    | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs<br><a href="#">Alternate(C)</a> | 0 tablet      | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/> | Chlorpheniramine Maleate 4mg Tablet         | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM          | 13 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                                 | 0 tablet      | 0 tablet         | 13 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/> | Salbutamol 100 mcg/dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM | 1 cannister | 0 cannister   | 0 <input checked="" type="checkbox"/> POMs                      | 0 cannister   | 0 cannister      | 1 cannister (7 day(s)) | Remarks | <input checked="" type="checkbox"/> Detail |                |             |

Figure 3.1.2-7 Prescription

**Note**

It will then goes back to Screening & Verification screen with changes being highlighted in blue text.

**3.1.3 Alternate Drug**

This function allow user to select different drug with the same active ingredient and same administration route. This function is available in screening verification screen and preparation screen, however the suitable time to do intervention is during screening and verification screen

| PRESCRIPTION   |   |   |             |   |               |                  |                      |         |                                 |                |
|--|---|---|-------------|---|---------------|------------------|----------------------|---------|---------------------------------|----------------|
| <span>PROCEED TO PREPARATION</span> <span>ENGLISH</span> <span>Prescription</span> <span>Patient sticker</span> <span>Label</span> <span>Label</span> <span>OP Label</span> <span>Allocate</span> <span>Full Supply</span> |   |   |             |   |               |                  |                      |         |                                 |                |
| Verify   |   |   |             |   |               |                  |                      |         |                                 |                |
| Supply Duration: 1 Day Next Collection Location: [Dropdown]  |   |   |             |   |               |                  |                      |         |                                 |                |
|  | Drug Name                                   | Order Details   | Order Qty   | Reserve Qty   | POMs Received | Dispense UOM Qty | Balance              | Remarks | Counselling Indication          | Extemporaneous |
| <input type="checkbox"/>   | Ceftriaxone 1g Injection                    | 1000 mg, OD, Intravenous Bolus, 5 Days<br>23/10/2019 05:09 PM - 28/10/2019 05:09 PM | 5 vial      | 0 <input type="checkbox"/> POMs                                       | 0 vial        | 0 vial           | 5 vial (5 day(s))    | Remarks | <input type="checkbox"/> Detail |                |
| <input type="checkbox"/>   | Paracetamol 500 mg Tablet                   | 1000 mg, PRN4, Oral, 5 Days<br>23/10/2019 05:10 PM - 28/10/2019 05:10 PM            | 40 tablet   | 0 <input type="checkbox"/> POMs<br><a href="#">Alternate</a> <b>1</b> | 0 tablet      | 0 tablet         | 40 tablet (5 day(s)) | Remarks | <input type="checkbox"/> Detail |                |
| <input type="checkbox"/>   | Chlorpheniramine Maleate 4mg Tablet         | 4 mg, ON, Oral, 5 Days<br>23/10/2019 05:10 PM - 28/10/2019 05:10 PM                 | 5 tablet    | 0 <input type="checkbox"/> POMs                                       | 0 tablet      | 0 tablet         | 5 tablet (5 day(s))  | Remarks | <input type="checkbox"/> Detail |                |
| <input type="checkbox"/>   | Salbutamol 100 mcg/dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 5 Days   | 1 cannister | 0 <input type="checkbox"/> POMs                                       | 0 cannister   | 0 cannister      | 1 cannister          | Remarks | <input type="checkbox"/> Detail |                |

**Figure 3.1.3-1 Screening & Verification – Alternate Drug**

**Note**

Repeat **Step 1 to Step 4** as in verify prescription as per Figure 3.1-1-1 before perform Alternate Drug steps.

**STEP 1**

Click on the [Alternate](#) link to do alternate as per Figure 3.1.3-1

| ALTERNATE DRUG DETAILS |                               |                           |       |                 |          |   |               |          |                |                                     |  |
|------------------------|-------------------------------|---------------------------|-------|-----------------|----------|---|---------------|----------|----------------|-------------------------------------|--|
| Location               |                               | Farmasi Pesakit Dalam     |       | Order Detail    |          | 1000 mg, PRN4, 5 Days                     |               |          |                |                                     |  |
| Ordered Drug Code      |                               | N02BE01000T1001XX         |       | Dosage Form     |          | Oral Tablet                               |               | <b>3</b> |                |                                     |  |
| Ordered Drug Desc      |                               | Paracetamol 500 mg Tablet |       | Route           |          | Oral                                      |               |          |                |                                     |  |
| Dispense UOM           |                               | tablet                    |       | Supply Duration |          | 1 days Date From 23/10/2019 to 24/10/2019 |               |          |                |                                     |  |
| BATCH DETAIL           |                               |                           |       |                 |          |   |               |          |                |                                     |  |
| No                     | Drug name                     | Dosage Form               | Route | Qty per dose    | Batch    | Expiry Date                               | Available Qty | SKU      | Allocation Qty | Select                              |  |
| 1                      | Paracetamol 250 mg/5 ml Syrup | Oral Solution             | Oral  | 20 ml           | 1701120A | 31/01/2020                                | 24392 ml      |          | 80             | <input checked="" type="checkbox"/> |  |
|                        |                               |                           |       | 0 ml            | 1701140A | 31/01/2020                                | 61838 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 17B0087  | 29/02/2020                                | 36000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 17C0281  | 31/03/2020                                | 36000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 17C0351  | 31/03/2020                                | 60000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 17G0982  | 31/07/2020                                | 24000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 17H0979  | 31/08/2020                                | 42000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | 18A0015  | 31/01/2021                                | 24000 ml      |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | PS18E002 | 30/04/2021                                | 110000 ml     |          | 0              | <input type="checkbox"/>            |  |
|                        |                               |                           |       | 0 ml            | PS18G006 | 30/06/2021                                | 25000 ml      |          | 0              | <input type="checkbox"/>            |  |
| Reason                 |                               |                           |       | Remark          |          |   |               |          |                |                                     |  |

**Figure 3.1.3-2 Alternate Drug Details**

**STEP 2**

Enter the **Qty per dose** and save record

**Note**

Dispense UOM is available to select as per Figure 3.1.3-2

**STEP 3**

Click on the button to save record

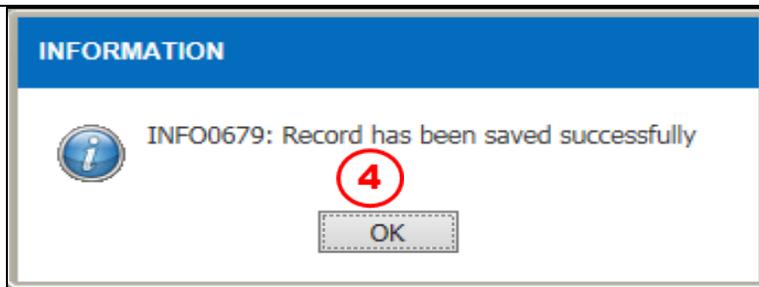
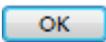


Figure 3.1.3-4 Information Alert Message

**STEP 4**

Click on the  button to save record and screen will automatically closed and back to prescription screen as Figure 3.1.3-5

| PRESCRIPTION             |   |   |             |               |  |               |                  |                        |         |                                 |                |               |
|--------------------------|---|---|-------------|---------------|--|---------------|------------------|------------------------|---------|---------------------------------|----------------|---------------|
|                          | Drug Name                                   | Order Detail  | Order Qty   | Prev Disp Qty | Reserve Qty                                  | POMs Received | Dispense UOM Qty | Balance                | Remarks | Drug Counseling                 | Extemporaneous | Prescrip Name |
| <input type="checkbox"/> | Ceftriaxone 1g Injection                    | 1000 mg, OD, Intravenous Bolus, 5 Days<br>23/10/2019 05:09 PM - 28/10/2019 05:09 PM | 5 vial      | 0 vial        | 0 <input type="checkbox"/> POMS              | 0 vial        | 0 vial           | 5 vial (5 day(s))      | Remarks | <input type="checkbox"/> Detail |                |               |
| <input type="checkbox"/> | Paracetamol 500 mg Tablet                   | 1000 mg, PRN4, Oral, 5 Days<br>23/10/2019 05:10 PM - 28/10/2019 05:10 PM            | 40 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMS<br>Alternate | 0 tablet      | 0 tablet         | 32 tablet (4 day(s))   | Remarks | <input type="checkbox"/> Detail |                |               |
|                          | Paracetamol 250 mg/5 ml Syrup               |   |             |               | 90 ml  |               |                  |                        |         |                                 |                |               |
| <input type="checkbox"/> | Chlorpheniramine Maleate 4mg Tablet         | 4 mg, ON, Oral, 5 Days<br>23/10/2019 05:10 PM - 28/10/2019 05:10 PM                 | 5 tablet    | 0 tablet      | 0 <input type="checkbox"/> POMS              | 0 tablet      | 0 tablet         | 5 tablet (5 day(s))    | Remarks | <input type="checkbox"/> Detail |                |               |
| <input type="checkbox"/> | Salbutamol 100 mcg/dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 5 Days<br>23/10/2019 05:10 PM - 28/10/2019 05:10 PM        | 1 cannister | 0 cannister   | 0 <input type="checkbox"/> POMS<br>Alternate | 0 cannister   | 0 cannister      | 1 cannister (5 day(s)) | Remarks | <input type="checkbox"/> Detail |                |               |

Figure 3.1.3-5 Updated Prescription

**3.1.4 Alternate / Combination Drug**

This function allow user to replace existing ordered drug with the combination of drug within the same active ingredient and same administration route as ordered drug. This function is available in screening verification screen and preparation screen, however the suitable time to do intervention is during screening and verification screen .

| PRESCRIPTION   |  |             |  |  |                  |                        |         |  |                |  |
|--|--|-------------|--|--|------------------|------------------------|---------|--|----------------|--|
| <span>PROCEED TO PREPARATION</span> <span>ENGLISH</span> <span>Prescription</span> <span>Patient sticker</span> <span>Label</span> <span>Label</span> <span>OP Label</span> <span>Allocate</span> <span>Full Supply</span> <span>Verify</span> |  |             |  |  |                  |                        |         |  |                |  |
| Supply Duration  |  | 1 Day       |  | Next Collection Location                     |                  |                        |         |  |                |  |
| Drug Name  | Order Details  | Order Qty   | Reserve Qty                                | POMs Received                                | Dispense UOM Qty | Balance                | Remarks | Counselling Indication                     | Extemporaneous |  |
| Atorvastatin 20 mg Tablet  | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM | 14 tablet   | 0 <input type="checkbox"/> POMs            | 0 tablet                                     | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |  |
| Simvastatin 10 mg Tablet   | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM | 14 tablet   | 0 <input type="checkbox"/> POMs            | <a href="#">Alternate(C)</a> <b>1</b> tablet | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |  |
| Chlorpheniramine Maleate 4mg Tablet  | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM  | 13 tablet   | 0 <input type="checkbox"/> POMs            | 0 tablet                                     | 0 tablet         | 13 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |  |
| Salbutamol 100 mcg/ dose Inhaler (200 doses)   | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:48 PM -             | 1 cannister | 0 <input checked="" type="checkbox"/> POMs | 0 cannister                                  | 0 cannister      | 1 cannister (7 day(s)) | Remarks | <input checked="" type="checkbox"/> Detail |                |  |

**Figure 3.1.4-1 Screening & Verification**

**Note**  
Repeat Step 1 to Step 4 as in verify prescription as per Figure 3.1.1-1 before perform **Alternate / Combination Drug** steps.

**STEP 1**

Click on the [Alternate\(C\)](#) hyperlink to perform alternate / combination drug as per Figure 3.1.4-1

| ALTERNATE DRUG DETAILS |                          |                          |       |                 |         |   |               |        |                |                          |
|------------------------|--------------------------|--------------------------|-------|-----------------|---------|---|---------------|--------|----------------|--------------------------|
| Location               |                          | Farmasi Pesakit Dalam    |       | Order Detail    |         | 20 mg, ON, 7 Days                         |               |        |                |                          |
| Ordered Drug Code      |                          | C10AA01000T1001XX        |       | Dosage Form     |         | Oral Tablet                               |               |        |                |                          |
| Ordered Drug Desc      |                          | Simvastatin 10 mg Tablet |       | Route           |         | Oral                                      |               |        |                |                          |
| Dispense UOM           |                          | tablet                   |       | Supply Duration |         | 1 days Date From 11/10/2019 To 12/10/2019 |               |        |                |                          |
| BATCH DETAIL           |                          | pack of 15 tablet        |       |                 |         |   |               |        |                |                          |
| No                     | Drug Name                | Dosage Form              | Route | Qty per dose    | Batch   | Expiry Date                               | Available Qty | SKU    | Allocation Qty | Select                   |
| 1                      | Simvastatin 10 mg Tablet | Oral Tablet              | Oral  | 0 tablet        | 2862926 | 31/03/2020                                | 17536         | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2875167 | 30/04/2020                                | 19000         | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2891177 | 30/06/2020                                | 5000          | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2905397 | 31/08/2020                                | 5000          | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2939175 | 31/12/2020                                | 5000          | tablet | 0              | <input type="checkbox"/> |
| 2                      | Simvastatin 40 mg Tablet | Oral Tablet              | Oral  | 0 tablet        | 2957766 | 28/02/2021                                | 10000         | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2981238 | 31/05/2021                                | 4000          | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2891482 | 30/06/2020                                | 13000         | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2906759 | 31/08/2020                                | 16500         | tablet | 0              | <input type="checkbox"/> |
|                        |                          |                          |       | 0 tablet        | 2921458 | 31/10/2020                                | 31500         | tablet | 0              | <input type="checkbox"/> |
| Reason                 |                          |                          |       | Remark          |         |   |               |        |                |                          |

**Figure 3.1.4-2 Alternate Drug Details**

**STEP 2**

Enter the **Qty per dose** field for selected combination drug

**STEP 3**

Click on the  button to save record

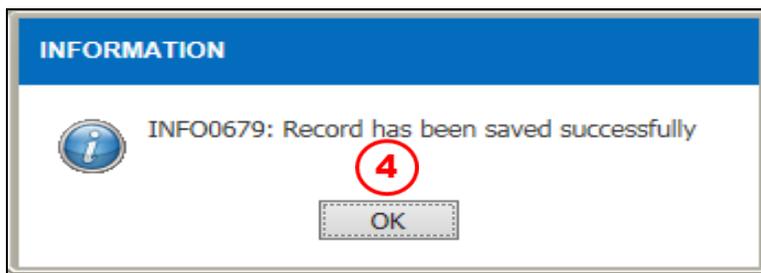
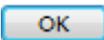


Figure 3.1.4-4 Information Alert Message

#### STEP 4

Click on the  button to save record and screen will be automatically closed and back to prescription screen as Figure 3.4-5

| PHARMACY ORDER   |  |  |             |               |   |               |                  |                        |         |  |                |             |
|--|--|--|-------------|---------------|---|---------------|------------------|------------------------|---------|--|----------------|-------------|
| Order Type   |  | Normal   |             | Order By      |   | Halimatus     |                  |                        |         |  |                |             |
| Supply Duration  |  | 1 Day  |             |               |   |               |                  |                        |         |  |                |             |
| PRESCRIPTION   |  |  |             |               |   |               |                  |                        |         |  |                |             |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ENGLISH <input type="checkbox"/> PROCEED TO PREPARATION <input type="checkbox"/> Patient sticker <input type="checkbox"/> Label <input type="checkbox"/> IP Label <input type="checkbox"/> OP Label <input type="checkbox"/> Full Supply <input type="checkbox"/> Allocate <input type="checkbox"/> Verify |  |  |             |               |   |               |                  |                        |         |  |                |             |
|  | Drug Name                                    | Order Detail   | Order Qty   | Prev Disp Qty | Reserve Qty                                     | POMs Received | Dispense UOM Qty | Balance                | Remarks | Drug Counselling                           | Extemporaneous | Prescri Nam |
| <input type="checkbox"/>   | Atorvastatin 20 mg Tablet                    | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/>   | Simvastatin 10 mg Tablet                     | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs<br>Alternate(Q) | 0 tablet      | 0 tablet         | 9 tablet (6 day(s))    | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/>   | Simvastatin 10 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |         |  |                |             |
| <input type="checkbox"/>   | Simvastatin 40 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |         |  |                |             |
| <input type="checkbox"/>   | Chlorpheniramine Maleate 4mg Tablet          | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM          | 13 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 13 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/>   | Salbutamol 100 mcg/ dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM | 1 cannister | 0 cannister   | 0 <input checked="" type="checkbox"/> POMs      | 0 cannister   | 0 cannister      | 1 cannister (7 day(s)) | Remarks | <input checked="" type="checkbox"/> Detail |                |             |

Figure 3.1.4-5 Updated Prescription

### 3.1.5 Hold / Resume

This function allows Pharmacist to hold medication from being prepare or dispense; may resume the medication order to continue dispensing .Hold/Resume process is available at Screening and Verification, Preparation and Dispensing

| PRESCRIPTION                        |  |  |             |               |   |               |                  |                        |         |  |                |             |
|-------------------------------------|--|--|-------------|---------------|---|---------------|------------------|------------------------|---------|--|----------------|-------------|
|                                     | Drug Name                                    | Order Detail   | Order Qty   | Prev Disp Qty | Reserve Qty                                     | POMs Received | Dispense UOM Qty | Balance                | Remarks | Drug Counselling                           | Extemporaneous | Prescri Nam |
| <input checked="" type="checkbox"/> | Atorvastatin 20 mg Tablet                    | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 14 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input checked="" type="checkbox"/> | Simvastatin 10 mg Tablet                     | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs<br>Alternate(C) | 0 tablet      | 0 tablet         | 9 tablet (6 day(s))    | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/>            | Simvastatin 10 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |         |  |                |             |
| <input type="checkbox"/>            | Simvastatin 40 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |         |  |                |             |
| <input type="checkbox"/>            | Chlorpheniramine Maleate 4mg Tablet          | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM          | 13 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 13 tablet (7 day(s))   | Remarks | <input type="checkbox"/> Detail            |                |             |
| <input type="checkbox"/>            | Salbutamol 100 mcg/ dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:48 PM - 18/10/2019 02:48 PM | 1 cannister | 0 cannister   | 0 <input checked="" type="checkbox"/> POMs      | 0 cannister   | 0 cannister      | 1 cannister (7 day(s)) | Remarks | <input checked="" type="checkbox"/> Detail |                |             |

Figure 3.1.5-1 Screening & Verification – Hold

**Hold**

**Note**

Repeat **Step 1 to Step 4** as verify prescription as per Figure 3.1.1-1 before perform Hold / Resume steps.

**STEP 1**

Select one drug by clicking on the  checkbox

**STEP 2**

Click on Hold button as per Figure 3.1.5-1

| HOLD ORDER - PHARMACIST REMARKS |   |              |        |
|---------------------------------|---|--------------|--------|
| Drug Name                       | Reason  | Other Reason | Remark |
| Atorvastatin 20 mg Tablet       | <input type="text" value=""/> <ul style="list-style-type: none"> <li>Authenticity</li> <li>Contraindication</li> <li>Drug Interaction</li> <li>Inappropriate Dose</li> <li>Inappropriate Drug</li> <li>Inappropriate Duration</li> <li>Inappropriate Frequency</li> <li>Incompatibility</li> <li>Intervention</li> <li>Others</li> <li>Patient Refused</li> <li>Polypharmacy</li> <li>Suggest to Monitor Vital Signs/Lab Result</li> <li>Wrong Patient</li> </ul> |              |        |

Figure 3.1.5-2 Hold Order – Pharmacist Remarks

**Note**

Select and enter from the **Hold Reason** drop down box:

- Authenticity
- Contraindication
- Drug Interaction
- Inappropriate Dose
- Inappropriate Drug
- Inappropriate Duration
- Inappropriate Frequency
- Incompatibility

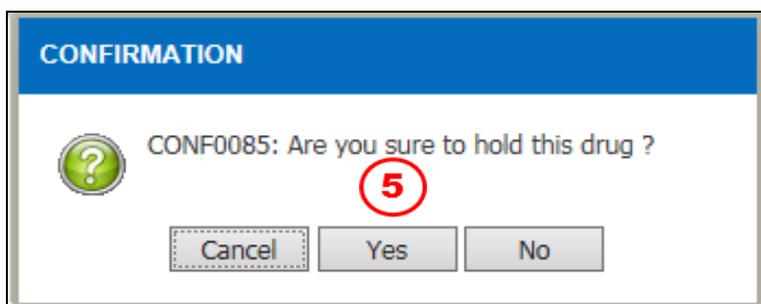
- Others
- Polypharmacy
- Suggest to Monitor Vital Signs/Lab Result
- Wrong Patient

**STEP 3**

Enter the Remarks field with applicable information

**STEP 4**

Click on the button



**Figure 3.1.5-3 Hold Drug Alert Message**

**STEP 5**

Click on the button to Hold Drug and confirmation pop up message will automatically close

**Resume**

| PHARMACY ORDER  |                                     |  |           |                          |  |                       |                  |  |   |                                 |                |               |
|---|-------------------------------------|--|-----------|--------------------------|--|-----------------------|------------------|--|---|---------------------------------|----------------|---------------|
| Supply Duration   |                                     | 1 Day  |           | Next Collection Location |  | Farmasi Pesakit Dalam |                  | SPUB <input type="checkbox"/> SPUB R1 Form |   |                                 |                |               |
| PRESCRIPTION  |                                     |  |           |                          |  |                       |                  |  |   |                                 |                |               |
| <input type="checkbox"/> ENGLISH Invoice Worksheet <input type="checkbox"/> Worksheet Balance Medication Sheet <input type="checkbox"/> Balance Medication Sheet <input type="checkbox"/> Patient sticker Label <input type="checkbox"/> IP Label <input type="checkbox"/> OP Label <input type="checkbox"/> Full Supply <input type="checkbox"/> Allocate <input type="checkbox"/> Prepare |                                     |  |           |                          |  |                       |                  |  |   |                                 |                |               |
|   | Drug Name                           | Order Detail   | Order Qty | Prev Disp Qty            | Reserve Qty  | POMs Received         | Dispense UOM Qty | Balance                                    | Remarks                                 | Drug Counselling                | Extemporaneous | Prescrib Name |
| <input type="checkbox"/>  | Paracetamol 500 mg Tablet           | 1000 mg, PRN4, Oral, 4 Days<br>08/10/2019 02:37 PM - 12/10/2019 02:37 PM | 32 tablet | 0 tablet                 | <input type="checkbox"/> POMs                              | 0 tablet              | 0 tablet         | 32 tablet (4 day(s))                       | Remarks <input type="checkbox"/> Detail |                                 |                |               |
| <input type="checkbox"/>  | Simvastatin 10 mg Tablet            | 1 tablet, ON, Oral, 4 Days<br>08/10/2019 02:38 PM - 12/10/2019 02:38 PM  | 4 tablet  | 0 tablet                 | <input type="checkbox"/> POMs <a href="#">Alternate(Q)</a> | 0 tablet              | 0 tablet         | 4 tablet (4 day(s))                        | Remarks <input type="checkbox"/> Detail |                                 |                |               |
| <input checked="" type="checkbox"/>   | Clopidogrel 75 mg Tablet            | 75 mg, OM, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM     | 4 tablet  | 0 tablet                 | <input type="checkbox"/> POMs                              | 0 tablet              | 0 tablet         | 4 tablet (4 day(s))                        | Remarks <input type="checkbox"/> Detail | <input type="checkbox"/> Detail |                |               |
| <input type="checkbox"/>  | Chlorpheniramine Maleate 4mg Tablet | 4 mg, ON, Oral, 4 Days<br>08/10/2019 02:39 PM - 12/10/2019 02:39 PM      | 4 tablet  | 0 tablet                 | <input checked="" type="checkbox"/> POMs                   | 4 tablet              | 0 tablet         | 4 tablet (4 day(s))                        | Remarks <input type="checkbox"/> Detail |                                 |                |               |

**Figure 3.1.5-4 Screening & Verification – Resume**

**STEP 1**

Click on the  button as per Figure 3.1.5-4

**STEP 2**

Click on the button and select Resume as per Figure 3.1.5-4

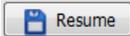
| HOLD ORDER - PHARMACIST REMARKS |        |                      |        |              |
|---------------------------------|--------|----------------------|--------|--------------|
| Drug Name                       | Reason | Other Reason         | Remark | Action Taken |
| Atorvastatin 20 mg Tablet       | Others | test for user manual |        |              |

Figure 3.1.5-5 Hold Order – Pharmacist Remarks

**STEP 3**

Enter information in **Action Taken** field

**STEP 4**

Click on the  button

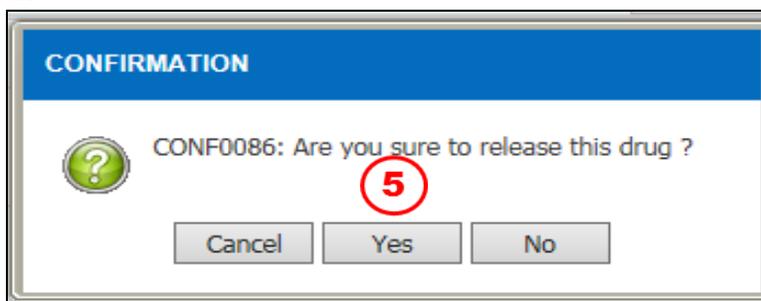


Figure 3.1.5-6 Confirmation Alert Message

**STEP 5**

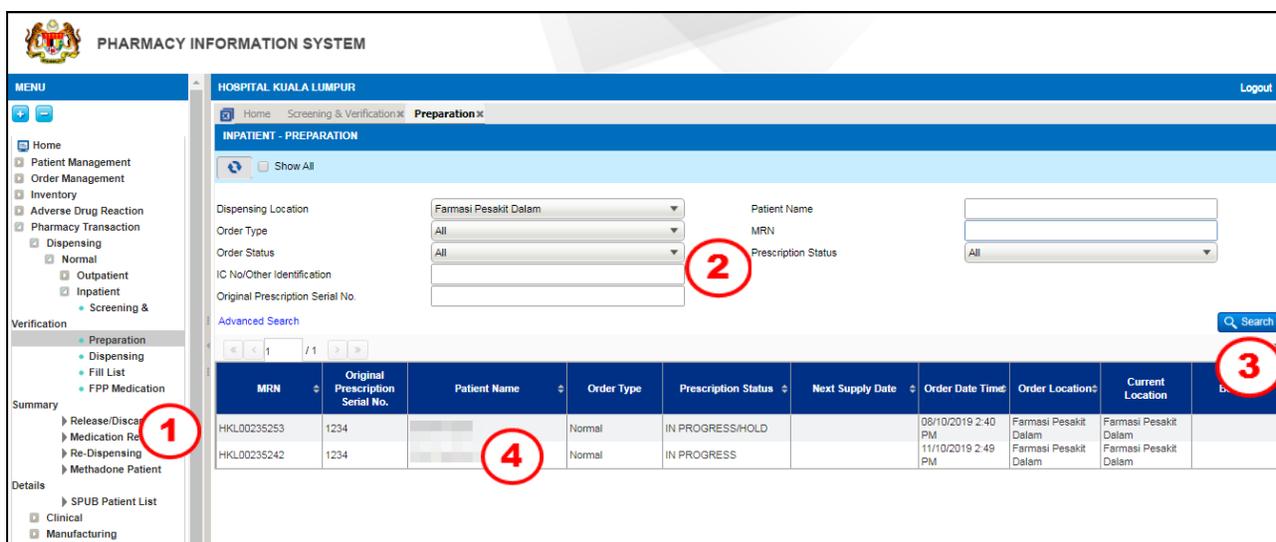
Click on the  button to release drug from hold and the Hold Order screen will automatically close

**3.2 Preparation**

This function is used to manage patient visits for both Outpatient and Inpatient such as patient admission, discharge and transfer.

### 3.2.1 Prepare

This function is used to prepare drug before dispensing stage



**PHARMACY INFORMATION SYSTEM**

HOSPITAL KUALA LUMPUR

Home | Screening & Verification | Preparation

INPATIENT - PREPARATION

Dispensing Location: Farmasi Pesakit Dalam

Order Type: All

IC No/Other Identification: [ ]

Original Prescription Serial No.: [ ]

Patient Name: [ ]

MRN: [ ]

Prescription Status: All

Advanced Search [ Search ]

| MRN         | Original Prescription Serial No. | Patient Name | Order Type | Prescription Status | Next Supply Date | Order Date Time    | Order Location        | Current Location      |  |
|-------------|----------------------------------|--------------|------------|---------------------|------------------|--------------------|-----------------------|-----------------------|--|
| HKL00235253 | 1234                             | [ ]          | Normal     | IN PROGRESS/HOLD    |                  | 08/10/2019 2:40 PM | Farmasi Pesakit Dalam | Farmasi Pesakit Dalam |  |
| HKL00235242 | 1234                             | [ ]          | Normal     | IN PROGRESS         |                  | 11/10/2019 2:49 PM | Farmasi Pesakit Dalam | Farmasi Pesakit Dalam |  |

Figure 3.2.1-1 Preparation Listing Page

#### STEP 1

Click on 'Preparation' sub menu

#### STEP 2

Search existing patient record as follow:

**a) Dispensing Location**

**b) Order Type**

- All
- Normal
- SPUB
- Discharge

**c) Mode of Services**

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

**d) Patient Name**

**e) MRN**

**f) Order Status**

- All
- New Order
- Partial Supply

**g) Prescription status**

- All
- Hold



- Expired

**h) IC No/Other Identification**

**Note**

Advanced Search

can be used to narrow down the criteria. It is consist of :

- a) Order Location
- b) Order Location Type
- c) Order Date From
- d) Order Date To
- e) Next Supply From
- f) Next Supply To
- g) Bed No

**STEP 3**

Click on the  button to search the patient

**STEP 4**

Double click on the selected patient's name

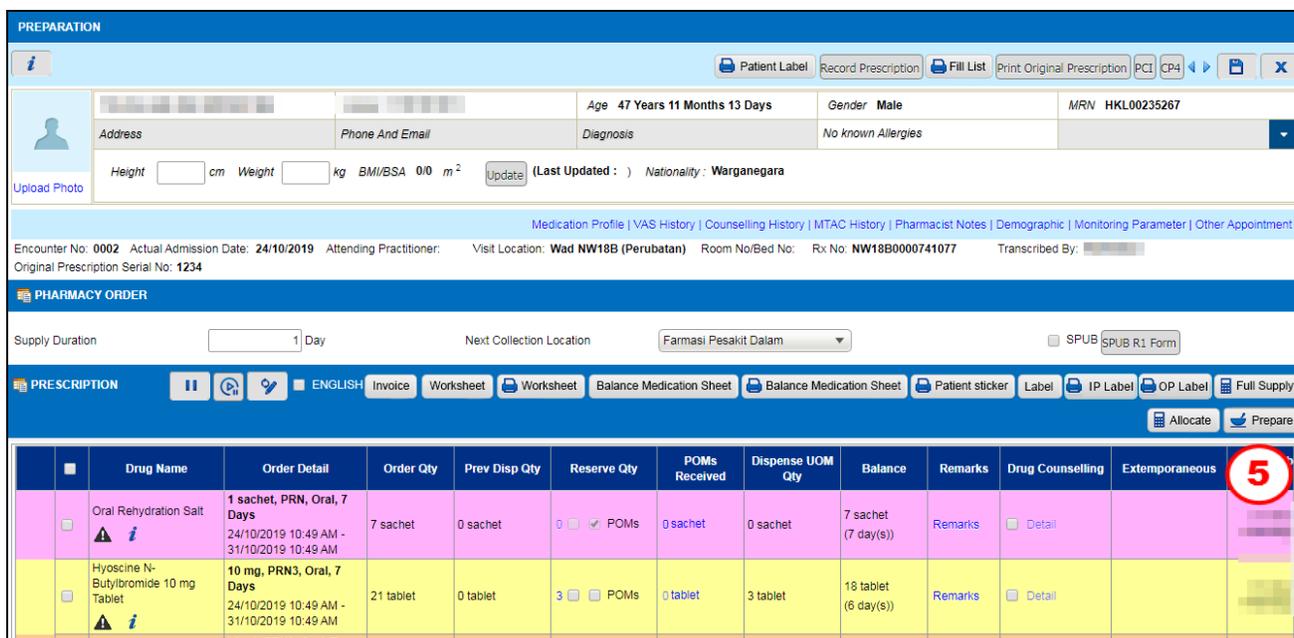
**Note**

On this listing page, various Search criteria as below:

| Basic Search   |                     |   |   |
|----------------|---------------------|---|---|
| No             | Field               | Description   | Remark  |
| a              | Show All            |   | Able to view all patient record   |
| b              | Dispensing Location | Dispensing location. (It will list down all active location)    | Able to filter and search patient name by dispensing location   |
| c              | Patient Name        | Patient Name  | Allow to search by entering fully or partially search criteria of patient's name  |
| d              | Order Type          | -All<br>-Normal<br>-SPUB<br>-Discharge<br>-Referred Patient     | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br>Normal – Prescription from normal order<br>SPUB - Prescription from SPUB order<br>Discharge - Prescription from Discharge order<br>Referred Patient – Prescription from referred patient |
| e              | MRN                 | Patient MRN   | Allow to search by entering fully or partially search criteria of MRN No  |
| f              | Order Status        | -All<br>-New Order<br>-Partial Supply<br>-Pending Authorization | All – Type of search from range New order, Partial Supply and Pending Authorization<br>New Order – Prescription of new order<br>Partial Supply – Prescription from partially dispense<br>Pending Authorization – Prescription contain of drug to authorize              |
| Advance Search |                     |   |   |
| g              | Order Location      | Order location. (It will list                                   |   |

|   |                     |   |   |
|---|---------------------|---|---|
|   |                     | down all active location)   |   |
| h | Order Location Type | - All<br>- Clinic<br>- Day Care<br>- ER<br>- Nursing Unit<br>- Pharmacy |   |
| i | Order Date From     |   | Start point for range of order date   |
| j | Order Date To       |   | Order Date To can be NULL or must be greater than the value for Order Date From |
| k | Bed                 |   | Search patient by bed number  |
| l | Recorded By         |   | Search patient by Recorded by name  |

Table 3.2.1



The screenshot displays the 'PREPARATION' interface. At the top, there are navigation buttons: Patient Label, Record Prescription, Fill List, Print Original Prescription, PCI, CP4, and a close button. Below this is a patient banner with fields for Address, Phone And Email, Diagnosis, No known Allergies, and MRN (HKL00235267). Patient details include Age (47 Years 11 Months 13 Days), Gender (Male), Height, Weight, BMI/BSA, and Nationality (Warganegara). A medication profile section shows Encounter No: 0002, Actual Admission Date: 24/10/2019, and Visit Location: Wad NW18B (Perubatan). The 'PHARMACY ORDER' section shows a supply duration of 1 Day and the next collection location as 'Farmasi Pesakit Dalam'. The 'PRESCRIPTION' section includes buttons for Invoice, Worksheet, Balance Medication Sheet, Patient sticker, Label, IP Label, OP Label, and Full Supply. A table lists two prescriptions:

| Drug Name                            | Order Detail   | Order Qty | Prev Disp Qty | Reserve Qty | POMs Received | Dispense UOM Qty | Balance              | Remarks | Drug Counselling | Extemporaneous |
|--------------------------------------|--|-----------|---------------|-------------|---------------|------------------|----------------------|---------|------------------|----------------|
| Oral Rehydration Salt                | 1 sachet, PRN, Oral, 7 Days<br>24/10/2019 10:49 AM - 31/10/2019 10:49 AM | 7 sachet  | 0 sachet      | 0           | 0 sachet      | 0 sachet         | 7 sachet (7 day(s))  | Remarks | Detail           |                |
| Hyoscine N-Butylbromide 10 mg Tablet | 10 mg, PRN3, Oral, 7 Days<br>24/10/2019 10:49 AM - 31/10/2019 10:49 AM   | 21 tablet | 0 tablet      | 3           | 0 tablet      | 3 tablet         | 18 tablet (6 day(s)) | Remarks | Detail           |                |

Figure 3.2.1-2 Preparation

**Note**

- When selected patient name is clicked, the summary of patient information will be displayed in the patient banner. The patient banner will be displayed at the specific screen which is required patient information. Below is the list of patient information:
  - Patient Name
  - Patient Address
  - Patient IC Number
  - Patient Phone and Email
  - Patient Diagnosis
  - Patient Age
  - Patient Allergy
  - Patient Gender
  - Patient MRN

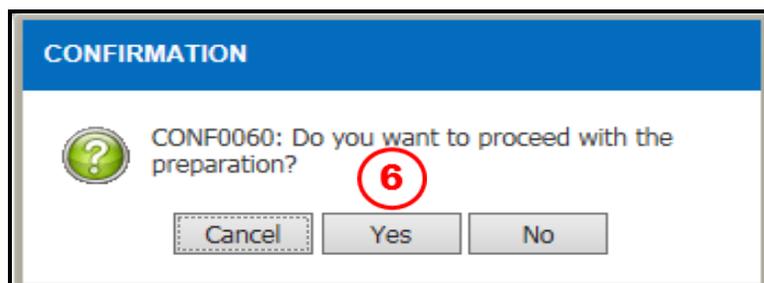
- Below options are provided to view the additional patient information. Click on the hyperlink as below:

**a) Lab Parameter**

- Patient's Laboratory Test Result
  - b) Counselling History**
    - Medication Counselling history records.
  - c) Demographic**
    - Patient's demographic details
  - d) Pharmacist Notes**
    - Pharmacy notes such as MTAC, Ward Pharmacy and etc.
  - e) Medication Profile**
    - This hyperlink will show the patient's current medication and previous medication history.
  - f) Other Appointments**
    - This screen provides information if there are any other appointments recorded for the patient.
  - g) Vas History**
    - This screen provides information on patients previous dispensing Mode of Services
- Current visit information will be displayed as below:
    - a) Admission Date
    - b) Attending practitioner
    - c) Visit location
    - d) Room No / Bed No
    - e) Rx No
    - f) Order By
  - Prescription from order management will be displayed as below:
    - a) Drug Name
    - b) Order Detail
    - c) Order Qty - Quantity of drug ordered by the prescriber.
    - d) Prev Disp Qty
    - e) Reserve Qty
    - f) POM received
    - g) Dispence OUM quantity
    - h) Balance
    - i) Remarks
    - j) Drug Counseling
    - k) Extemporaneous
    - l) Prescriber name
    - m) Status
    - n) Drug Info
    - o) Drug Interaction Alert

#### STEP 5

Click on the  button to proceed prepare process



### Figure 3.2.1-3 Confirmation Alert Message

#### STEP 6

Click on the  button to confirm preparation

#### **Note**

*These are the options to select and print reports as per Figure 4.1-4:*

- a) *Balance Medication Sheet – English*
- b) *Balance Medication Sheet – Malay*
- c) *Worksheet*
- d) *Dispense Labels*

### **3.2.2 Allocate Quantity**

This function is used to allocate quantity manually or change the quantity calculated by application

| PHARMACY ORDER  |  |  |             |                          |   |                       |                  |   |         |  |                |                 |            |
|---|--|--|-------------|--------------------------|---|-----------------------|------------------|---|---------|--|----------------|-----------------|------------|
| Supply Duration   |  | 1 Day  |             | Next Collection Location |   | Farmasi Pesakit Dalam |                  | SPUB <input type="checkbox"/> SPUB R.I Form |         |  |                |                 |            |
| PRESCRIPTION  |  |  |             |                          |   |                       |                  |   |         |  |                |                 |            |
| <input type="checkbox"/> ENGLISH Invoice Worksheet Worksheet Balance Medication Sheet Balance Medication Sheet Patient sticker Label IP Label OP Label Full Supply Allocate Prepare |  |  |             |                          |   |                       |                  |   |         |  |                |                 |            |
|   | Drug Name                                    | Order Detail   | Order Qty   | Prev Disp Qty            | Reserve Qty   | POMs Received         | Dispense UOM Qty | Balance                                     | Remarks | Drug Counselling                           | Extemporaneous | Prescriber Name | Status     |
| <input type="checkbox"/>  | Atorvastatin 20 mg Tablet                    | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM         | 14 tablet   | 0 tablet                 | 2 <input type="checkbox"/> POMs                                 | 0 tablet              | 2 tablet         | 12 tablet (4 day(s))                        | Remarks | <input type="checkbox"/> Detail            |                |                 | Verified   |
| <input type="checkbox"/>  | Simvastatin 10 mg Tablet                     | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM         | 14 tablet   | 0 tablet                 | 0 <input type="checkbox"/> POMs<br><a href="#">Alternate(?)</a> | 0 tablet              | 0 tablet         | 9 tablet (4 day(s))                         | Remarks | <input type="checkbox"/> Detail            |                |                 | Verified   |
|   | Simvastatin 10 mg Tablet                     |  |             |                          | 1 tablet  |                       |                  |   |         |  |                |                 |            |
|   | Simvastatin 40 mg Tablet                     |  |             |                          | 1 tablet  |                       |                  |   |         |  |                |                 |            |
| <input type="checkbox"/>  | Chlorpheniramine Maleate 4mg Tablet          | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM          | 13 tablet   | 0 tablet                 | 1 <input type="checkbox"/> POMs                                 | 0 tablet              | 0 tablet         | 13 tablet (4 day(s))                        | Remarks | <input type="checkbox"/> Detail            |                |                 | Ward Stock |
| <input type="checkbox"/>  | Salbutamol 100 mcg/ dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM | 1 cannister | 0 cannister              | 0 <input checked="" type="checkbox"/> POMs                      | 0 cannister           | 0 cannister      | 1 cannister (4 day(s))                      | Remarks | <input checked="" type="checkbox"/> Detail |                |                 | Verified   |

Figure 3.2.2-1 Preparation

**Note**

Repeat **Step 1 – Step 4** as in prepare as per Figure 4.1.1-1 before performs Allocate Quantity steps.

**STEP 1**

Click on **Reserve Qty** hyperlink to allocate quantity

**Note**

User is allowed to allocate 0 quantity in Reserve Qty field by clicking the  checkbox.

**ITEM BATCH DETAILS**

Drug Code:

Drug Name:

Order Detail:

Default SKU:

Dispense UOM:

Supply Duration:  Date From:  to:

**BATCH DETAIL**

[ 1 - 10 / 13 ]

| Batch No                    | Expiry Date | Available Qty | UOM Qty  | Allocated Qty |
|-----------------------------|-------------|---------------|----------|---------------|
| 2830211 (box of 100 tablet) | 31/10/2019  | 3398          | 2 tablet | 2             |
| 2852103                     | 31/01/2020  | 5400          | 0 tablet | 0             |
| 2858733                     | 29/02/2020  | 20000         | 0 tablet | 0             |
| 2866530                     | 31/03/2020  | 17400         | 0 tablet | 0             |
| 2888812                     | 30/06/2020  | 28200         | 0 tablet | 0             |
| 2912322                     | 30/09/2020  | 31600         | 0 tablet | 0             |
| 2921075                     | 31/10/2020  | 33700         | 0 tablet | 0             |
| 2962709                     | 21/03/2021  | 25200         | 0 tablet | 0             |
| 2968206                     | 21/03/2021  | 42000         | 0 tablet | 0             |
| 2984421                     | 31/05/2021  | 21000         | 0 tablet | 0             |

Total Available Qty:

Total Allocated Qty:

Figure 3.2.2-2 Item Batch Details

**STEP 2**

Enter the **UOM Qty** field

**Note**

- User is allowed to choose and Allocate Qty from Batch Detail.
- **Dispense UOM**   will be automatically generated from the drug master.
- Item Batch Details will be displayed:
  - a) **Drug Code** - The value will be defaulted to the drug code selected from the prescription list, auto display.
  - b) **Drug Name** - The value will be defaulted to the drug name selected from the prescription list, auto display.
  - c) **Order Detail** - The value will be defaulted to the duration selected from the prescription list. Will include duration, date and time for medication, auto display.
  - d) **Default SKU** - The value will be defaulted to the SKU selected from the prescription list, auto display.
  - e) **Supply Duration** - The value will be defaulted to the duration selected from the prescription list, auto display.
  - f) **Date** - The value will be defaulted to the supply duration selected from the prescription list, auto display.
- **Batch Detail** - will list down all item batches which are related to the selected drug where expiry date is less than 30 days from the current date.
  - a) **Batch No** – Available batch no
  - b) **Expiry Date** – Batch expiry date
  - c) **Available Qty** – Quantity available for the selected batch
  - d) **UOM Qty** – Quantity available by UOM
  - e) **Allocate Qty** – Reserved quantity from the selected batch. Allocated quantity cannot be more than the available quantity and order quantity.
  - f) **Total Available Qty** - will show the quantity of the drug available for the selected dispensing location only,

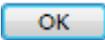
*auto display.*

- g) **Total Allocated Qty** - will show total of allocated quantity for the selected drug, It will auto calculate the total quantity when user allocates the quantity for the selected batch no, auto display.

### STEP 3

Click on the  button to save record

### STEP 4

Click on the  button to save record and screen will automatically closed

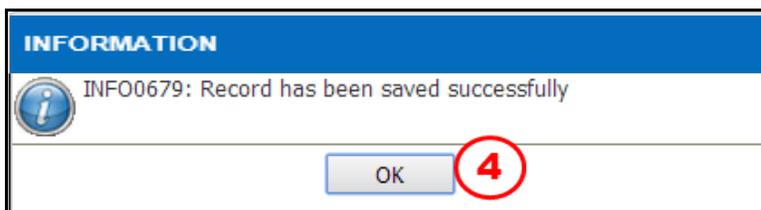
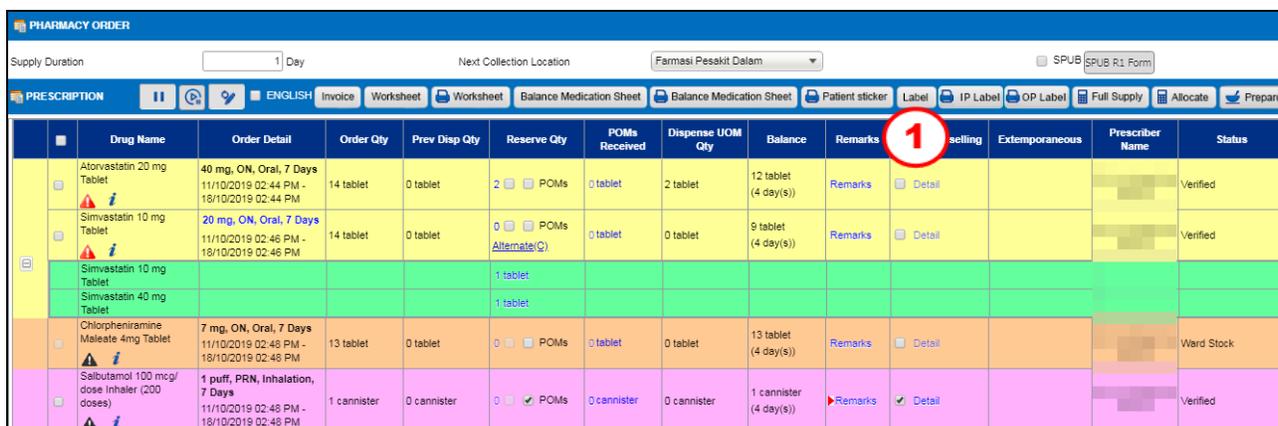


Figure 3.2.2-4 Information Alert Message

### 3.2.3 Drug Label

This function is used to edit and print drug label.



|                          | Drug Name                                    | Order Detail   | Order Qty   | Prev Disp Qty | Reserve Qty                                     | POMs Received | Dispense UOM Qty | Balance                | Remarks                                 | 1 selling                           | Extemporaneous | Prescriber Name | Status     |
|--------------------------|--|--|-------------|---------------|---|---------------|------------------|------------------------|---|-------------------------------------|----------------|-----------------|------------|
| <input type="checkbox"/> | Atorvastatin 20 mg Tablet                    | 40 mg, ON, Oral, 7 Days<br>11/10/2019 02:44 PM - 18/10/2019 02:44 PM         | 14 tablet   | 0 tablet      | 2 <input type="checkbox"/> POMs                 | 0 tablet      | 2 tablet         | 12 tablet (4 day(s))   | Remarks <input type="checkbox"/> Detail | <input type="checkbox"/>            |                |                 | Verified   |
| <input type="checkbox"/> | Simvastatin 10 mg Tablet                     | 20 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM         | 14 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs<br>Alternata(C) | 0 tablet      | 0 tablet         | 9 tablet (4 day(s))    | Remarks <input type="checkbox"/> Detail | <input type="checkbox"/>            |                |                 | Verified   |
| <input type="checkbox"/> | Simvastatin 10 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |   |                                     |                |                 |            |
| <input type="checkbox"/> | Simvastatin 40 mg Tablet                     |  |             |               | 1 tablet  |               |                  |                        |   |                                     |                |                 |            |
| <input type="checkbox"/> | Chlorpheniramine Maleate 4mg Tablet          | 7 mg, ON, Oral, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM          | 13 tablet   | 0 tablet      | 0 <input type="checkbox"/> POMs                 | 0 tablet      | 0 tablet         | 13 tablet (4 day(s))   | Remarks <input type="checkbox"/> Detail | <input type="checkbox"/>            |                |                 | Ward Stock |
| <input type="checkbox"/> | Salbutamol 100 mcg/ dose Inhaler (200 doses) | 1 puff, PRN, Inhalation, 7 Days<br>11/10/2019 02:46 PM - 18/10/2019 02:46 PM | 1 cannister | 0 cannister   | 0 <input checked="" type="checkbox"/> POMs      | 0 cannister   | 0 cannister      | 1 cannister (4 day(s)) | Remarks <input type="checkbox"/> Detail | <input checked="" type="checkbox"/> |                |                 | Verified   |

Figure 3.2.3-1 Preparation – Drug Label

**Note**

- Repeat **Step 1 to Step 4** as in prepare as per Figure 4.1-1 before performs Drug Label steps. There are to option to print label
  -  Preview then print
  -  Print in IP format without preview (Direct printing)
  -  Print in OP format without preview (Direct printing)
- Pre-Requisite to print label is **Reserve Quantity** field must have value >0 (Drug Allocated)

**STEP 1**

Click on the  button to print drug label

**Note**

- User able to click drug label to automatically print all medication labels
- Click on Print in Local Language check box to print label in Malay.
- Enter No of Label to Print.
- Able to edit Administration Instruction, Indication, Cautionary, Special Instruction, Expiry Date and Price

**STEP 2**

Click on the  button to preview **Drug Label**



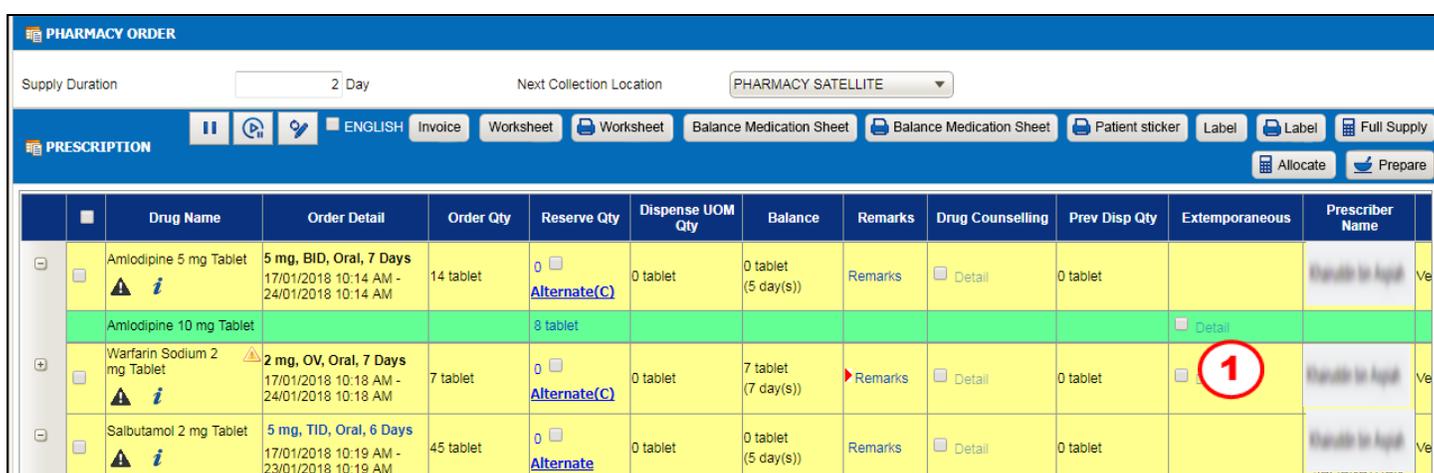


|  |                       |                     |
|--|-----------------------|---------------------|
| <b>HOSPITAL KUALA LUMPUR (Tel: 0326155555)</b> |                       |                     |
| [REDACTED]                                     |                       |                     |
| HKL00235242                                    | Farmasi Pesakit Dalam | [REDACTED]          |
| <b>Atorvastatin 20mg Tab</b>                   |                       |                     |
| <b>Ambil 2 biji Setiap malam</b>               |                       |                     |
| -  |                       |                     |
| Boleh diambil SEBELUM ATAU SELEPAS makan       |                       |                     |
| <b>Tahap kolesterol tinggi</b>                 |                       |                     |
| 11/10/19-12/10/19 [1 hari]                     | 2 biji                | RM1.00              |
| UBAT TERKAWAL JAUHI DARIPADA KANAK-KANAK       |                       | 14/10/2019 04:17 PM |

Figure 3.2.3-5 Preview Outpatient Drug Label

### 3.2.4 Extemporaneous – By Patient

This function is used to generate and print the Ingredient label prepared for patient, based on drugs setup. Extemporaneous preparation prepared by patient at home.



The screenshot shows the 'PHARMACY ORDER' interface. At the top, there are fields for 'Supply Duration' (2 Day) and 'Next Collection Location' (PHARMACY SATELLITE). Below this is a toolbar with various icons and buttons like 'ENGLISH', 'Invoice', 'Worksheet', 'Balance Medication Sheet', 'Patient sticker', 'Label', and 'Full Supply'. The main area is a table with columns: Drug Name, Order Detail, Order Qty, Reserve Qty, Dispense UOM Qty, Balance, Remarks, Drug Counselling, Prev Disp Qty, Extemporaneous, and Prescriber Name. The table contains three rows of medication orders. The second row, 'Warfarin Sodium 2 mg Tablet', has the 'Extemporaneous' checkbox checked and circled in red with the number '1'. The other rows have the checkbox unchecked.

|                          | Drug Name                   | Order Detail   | Order Qty | Reserve Qty                                | Dispense UOM Qty | Balance                | Remarks | Drug Counselling                | Prev Disp Qty | Extemporaneous                               | Prescriber Name  |
|--------------------------|-----------------------------|--|-----------|--|------------------|------------------------|---------|---------------------------------|---------------|--|------------------|
| <input type="checkbox"/> | Amlodipine 5 mg Tablet      | 5 mg, BID, Oral, 7 Days<br>17/01/2018 10:14 AM - 24/01/2018 10:14 AM | 14 tablet | 0 <input type="checkbox"/><br>Alternate(C) | 0 tablet         | 0 tablet<br>(5 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input type="checkbox"/>                     | Handwritten text |
| <input type="checkbox"/> | Amlodipine 10 mg Tablet     |  |           | 8 tablet                                   |                  |                        |         | <input type="checkbox"/> Detail |               | <input type="checkbox"/>                     |                  |
| <input type="checkbox"/> | Warfarin Sodium 2 mg Tablet | 2 mg, OV, Oral, 7 Days<br>17/01/2018 10:18 AM - 24/01/2018 10:18 AM  | 7 tablet  | 0 <input type="checkbox"/><br>Alternate(C) | 0 tablet         | 7 tablet<br>(7 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input checked="" type="checkbox"/> <b>1</b> | Handwritten text |
| <input type="checkbox"/> | Salbutamol 2 mg Tablet      | 5 mg, TID, Oral, 6 Days<br>17/01/2018 10:19 AM - 23/01/2018 10:19 AM | 45 tablet | 0 <input type="checkbox"/><br>Alternate    | 0 tablet         | 0 tablet<br>(5 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input type="checkbox"/>                     | Handwritten text |

Figure 3.2.4-1 Preparation – Extemporaneous

**Note**

Repeat **Step 1 to Step 2** as in prepare as per Figure 3.2.1-1 before performs Extemporaneous by Patient steps.

**STEP 1**

Click on the **Extemporaneous**  checkbox and system will display extemporaneous screen as Figure 4.4.-2

**EXTEMPORANEOUS** 4

5
Print Ingredient Label   Generate Worksheet

Preparation Done By    Pharmacist    Patient 2

Preparation Name 3   Warfarin 0.2mg/ml Oral Liquid(OraP:OraS) \*   Concentration    mg /ml  
Dosage    ml

| Item              | Item Name                   | Quantity                        | UOM                             |
|-------------------|-----------------------------|---------------------------------|---------------------------------|
| Active Ingredient | Warfarin Sodium 2 mg Tablet |                                 | 2 tablet                        |
| Vehicle           | OraPlus:OraSweet, 1:1       | <input type="text" value="20"/> | <input type="text" value="ml"/> |

Storage Condition and Procedures in Local Language

Storage Condition      Expiry    Days

References      Formulation Remarks

Procedures(Preparation by Pharmacist)

Procedures(Preparation by Patient)

Preparation Remarks

**Figure 3.2.4-2 Preparation – Extemporaneous**

**STEP 2**

Click on 'Patient' radio button

**STEP 3**

Select **Preparation Name** from the drop down box

**Note**

- Concentration, dosage, Quantity, Storage Condition, Vehicle Expiry Date, Formulation Remarks and Procedures/Preparation by Patient and Reference will be retrieve from Master Setup.
- Allow to select Storage Condition and Procedures in Local Language.
- Allow to change **Vehicle** UOM if applicable.
- Allow to change **Expiry** duration.
- **Procedures/Preparation** by Pharmacist is editable.

**STEP 4**

Click on the button to save record

**STEP 5**

Click on the button to print ingredient label

**STEP 6**

Click on the  button to print the label

|                                 |                      |
|---------------------------------|----------------------|
| Warfarin Sodium 2 mg Tablet (6) |                      |
| 2 tablet                        |                      |
| Batch No: NH0400                | Exp Date: 30/06/2020 |
| APOTEX (APO)                    |                      |
| Ubat Terkawal                   |                      |

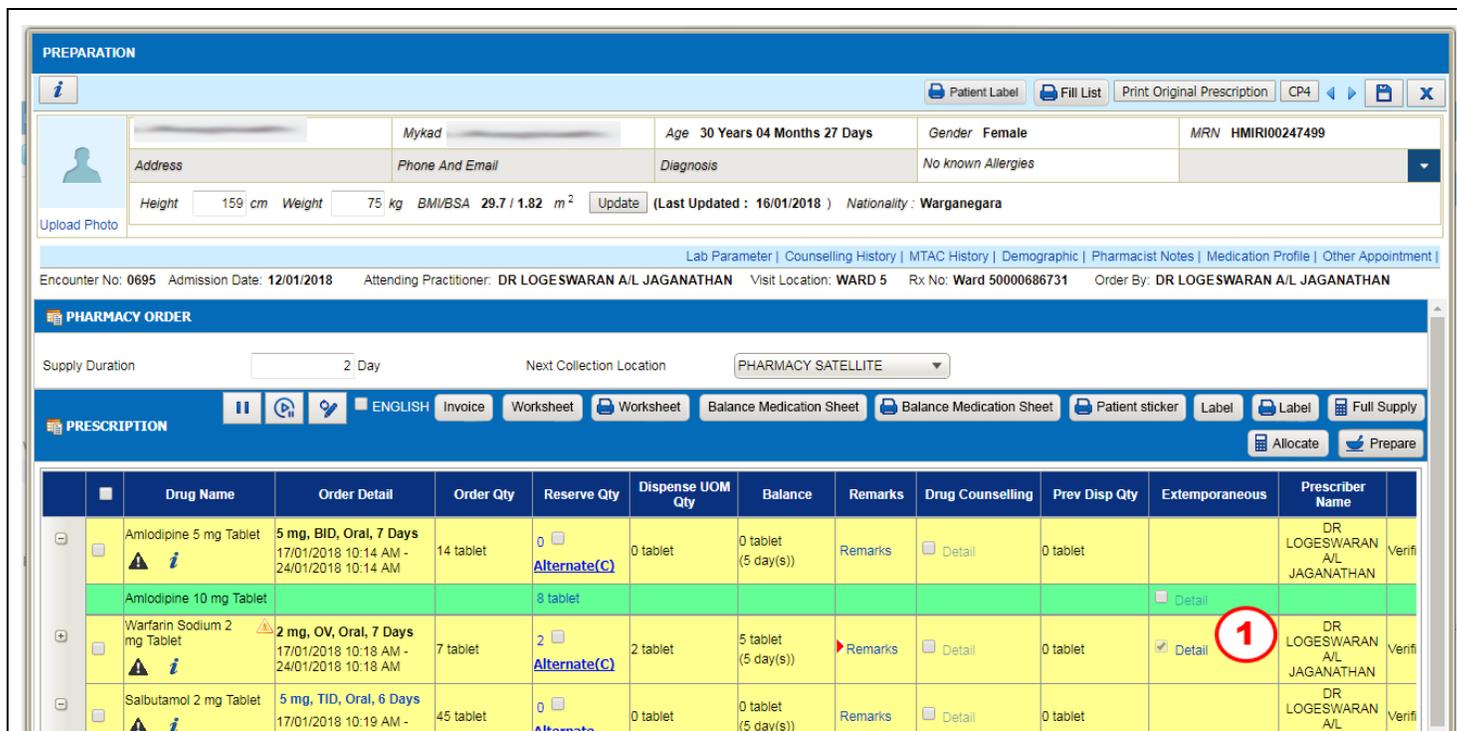
**Figure 3.2.4-3 Sample Of Extemporaneous Ingredient Label**

**Note**

Refer Figure 3.2.4-3 for the Ingredient Label Prepared by Patient sample.

### 3.2.5 Extemporaneous – By Pharmacist

This function is used to generate and print the Ingredient label prepared for patient, based on drugs setup. Extemporaneous preparation prepared by patient at home.



**PREPARATION**

Mykad: [Redacted] Age: 30 Years 04 Months 27 Days Gender: Female MRN: HMIRI00247499  
 Address: [Redacted] Phone And Email: [Redacted] Diagnosis: [Redacted] No known Allergies  
 Height: 159 cm Weight: 75 kg BMI/BSA: 29.7 / 1.82 m<sup>2</sup> Update (Last Updated : 16/01/2018) Nationality: Warganegara

Lab Parameter | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment

Encounter No: 0695 Admission Date: 12/01/2018 Attending Practitioner: DR LOGESWARAN A/L JAGANATHAN Visit Location: WARD 5 Rx No: Ward 50000686731 Order By: DR LOGESWARAN A/L JAGANATHAN

**PHARMACY ORDER**

Supply Duration: 2 Day Next Collection Location: PHARMACY SATELLITE

**PRESCRIPTION**

|                          | Drug Name                   | Order Detail   | Order Qty | Reserve Qty                                | Dispense UOM Qty | Balance             | Remarks | Drug Counselling                | Prev Disp Qty | Extemporaneous                                      | Prescriber Name              |
|--------------------------|-----------------------------|--|-----------|--|------------------|---------------------|---------|---------------------------------|---------------|---|------------------------------|
| <input type="checkbox"/> | Amlodipine 5 mg Tablet      | 5 mg, BID, Oral, 7 Days<br>17/01/2018 10:14 AM - 24/01/2018 10:14 AM | 14 tablet | 0 <input type="checkbox"/><br>Alternate(C) | 0 tablet         | 0 tablet (5 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input type="checkbox"/>                            | DR LOGESWARAN A/L JAGANATHAN |
|                          | Amlodipine 10 mg Tablet     |  |           | 8 tablet                                   |                  |                     |         | <input type="checkbox"/> Detail |               | <input type="checkbox"/>                            |                              |
| <input type="checkbox"/> | Warfarin Sodium 2 mg Tablet | 2 mg, OV, Oral, 7 Days<br>17/01/2018 10:18 AM - 24/01/2018 10:18 AM  | 7 tablet  | 2 <input type="checkbox"/><br>Alternate(C) | 2 tablet         | 5 tablet (5 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input checked="" type="checkbox"/> Detail <b>1</b> | DR LOGESWARAN A/L JAGANATHAN |
| <input type="checkbox"/> | Salbutamol 2 mg Tablet      | 5 mg, TID, Oral, 6 Days<br>17/01/2018 10:19 AM -                     | 45 tablet | 0 <input type="checkbox"/><br>Alternate    | 0 tablet         | 0 tablet (5 day(s)) | Remarks | <input type="checkbox"/> Detail | 0 tablet      | <input type="checkbox"/>                            | DR LOGESWARAN A/L            |

Figure 3.2.5-1 Preparation – Extemporaneous

**Note**

Repeat Step 1 to Step 2 as in prepare as per Figure 3.2.1-1 before performs Extemporaneous by Patient steps.

**STEP 1**

Click on the *Extemporaneous*  checkbox and system will be displayed extemporaneous screen as Figure 4.5-2

**STEP 2**

Click on 'Pharmacist' radio button

EXTEMPORANEOUS
5
4
7


2
Print Ingredient Label
Generate Worksheet




Preparation Done By  Pharmacist  Patient Worksheet ID

Preparation Name 3 Warfarin 0.2mg/ml Oral Liquid(OraP:OraS) Concentration  mg /ml

Dosage  ml

| Item              | Item Name                   | Quantity                        | UOM                             |
|-------------------|-----------------------------|---------------------------------|---------------------------------|
| Active Ingredient | Warfarin Sodium 2 mg Tablet |                                 | 2 tablet                        |
| Vehicle           | OraPlus:OraSweet, 1:1       | <input type="text" value="20"/> | <input type="text" value="ml"/> |

Storage Condition and Procedures in Local Language

Storage Condition  Expiry  Days

References  Formulation Remarks

Procedures(Preparation by Pharmacist)

Procedures(Preparation by Patient)

Preparation Remarks

Figure 3.2.5-2 Preparation – Extemporaneous

**STEP 3**

Select *Preparation Name* from drop down box

**Note**

- *Concentration, dosage, Quantity, Storage Condition, Vehicle, Expiry Date, Formulation Remarks and Procedures/Preparation by Patient and Reference will be retrieve from Master Setup.*
- *Allow to select Storage Condition and Procedures in Local Language.*
- *Allow to change Vehicle UOM if applicable.*
- *Allow to change Expiry duration.*

**STEP 4**

Click on the  button to save record

**STEP 5**

Click on the  button to print Ingredient Worksheet

**Note**

- Refer Figure 4.5-3 for the Extemporaneous Worksheet by Pharmacist sample.
- Able to print Worksheet for prepare drug for patient.

**STEP 6**



Click on the  button to print the worksheet

**STEP 7**



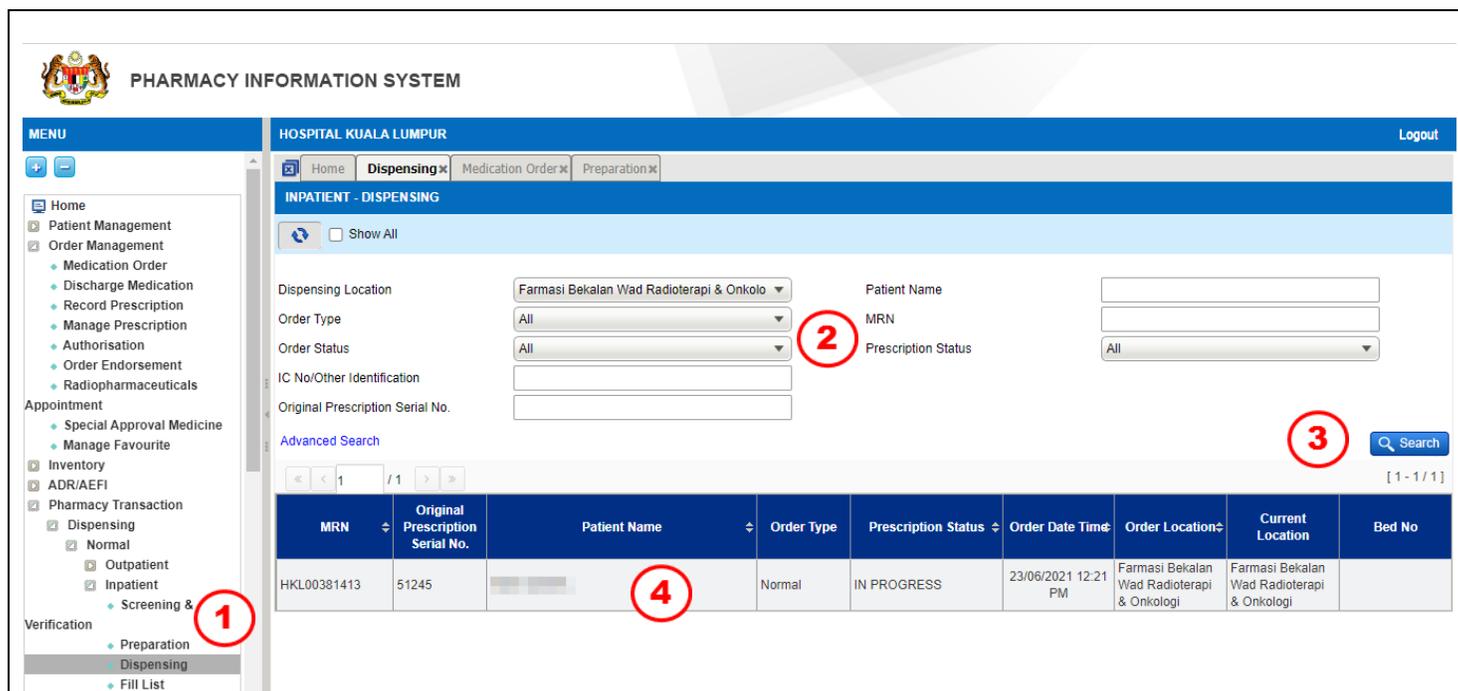
Click on the  button and close record

| EXTEMPORANEOUS WORKSHEET (PARTIAL)                     |      |  |            |             |  |                     |                          |             |                             |
|--|------|--|------------|-------------|--|---------------------|--------------------------|-------------|-----------------------------|
| MINISTRY OF HEALTH                                     |      |  |            |             |  |                     |                          |             |                             |
| 6 Hospital Miri  |      |  |            |             |  |                     |                          |             |                             |
| Date of preparation : 17/01/2018                       |      |  |            |             | Worksheet Id: 18-01-0013   |                     |                          |             |                             |
| MRN  |      |  |            |             | Name   |                     |                          |             |                             |
| ID No  |      |  |            |             | Rx. No.  |                     | Ward 50000686731         |             |                             |
| Order Location   |      | WARD 5   |            |             | Ordered By   |                     | DR                       |             |                             |
| Order Date   |      | 17/01/2018   |            |             |  |                     |                          |             |                             |
| No   | ROA  | Preparation Name   | Dose       | Total Dose  | Material Used  |                     |                          |             | Storage                     |
|  |      |  |            |             | Item Name  | Volume/Qty Required | Batch No                 | Expiry Date |                             |
| 1.   | Oral | Warfarin 0.2mg/ml Oral Liquid(OraP:OraS)<br>Expiry Date : 24/01/2018 | 2mg (10ML) | 4mg (20 ml) | Warfarin Sodium 2 mg Tablet  | 2 tablet            | NH0400                   | 30/06/2020  | Refrigerate<br>Amber bottle |
|  |      |  |            |             | OraPlus:OraSweet, 1:1  | 20 ml               |                          |             |                             |
| Remarks:   |      |  |            |             | <b>Instruction:</b><br>1. Crush tablets in a mortar to a fine powder.<br>2. Levigate the powder with distilled water until a smooth paste is formed.<br>3. Add more distilled water to the paste until a liquid is formed and transfer the liquid into the container.<br>4. Use additional vehicle to rinse the remaining drug from the mortar and pour into the container.<br>5. Make up to final volume with vehicle.<br>6. Shake well and label |                     |                          |             |                             |
| Reference: Handbook of Extemporaneous Preparation 2010 |      |  |            |             |  |                     |                          |             |                             |
| Worksheet generated by                                 |      | Worksheet & label checked by   |            |             | Prepared by  |                     | Final Product Checked by |             |                             |
| KOK HENG FENG  |      |  |            |             |  |                     |                          |             |                             |
| Date: 17/01/2018                                       |      | Date:  |            |             | Date:  |                     | Date: 17/01/2018         |             |                             |

Figure 3.2.5-3 Preparation – Extemporaneous

### 3.3 Dispensing

This function allow user to record dispensing, to hold, resume and edit label.



**PHARMACY INFORMATION SYSTEM**

**HOSPITAL KUALA LUMPUR** Logout

Home | **Dispensing** | Medication Order | Preparation

**INPATIENT - DISPENSING**

Show All

Dispensing Location: Farmasi Bekalan Wad Radioterapi & Onkolo

Order Type: All

Order Status: All

IC No/Other Identification: [ ]

Original Prescription Serial No.: [ ]

Advanced Search [ Search ]

MRN: [ ]

MRN: [ ]

Prescription Status: All

| MRN         | Original Prescription Serial No. | Patient Name | Order Type | Prescription Status | Order Date Time     | Order Location                             | Current Location                           | Bed No |
|-------------|----------------------------------|--------------|------------|---------------------|---------------------|--|--|--------|
| HKL00381413 | 51245                            | [ ]          | Normal     | IN PROGRESS         | 23/06/2021 12:21 PM | Farmasi Bekalan Wad Radioterapi & Onkologi | Farmasi Bekalan Wad Radioterapi & Onkologi |        |

Figure 3.3-1 Dispensing Landing Screen Note

**Note**

Various search criteria for Patient is provided as below:

| Basic Search |                     |   |   |
|--------------|---------------------|---|---|
| No           | Field               | Description   | Remark  |
| a            | Show All            |   | Able to view all patient record   |
| b            | Dispensing Location | Dispensing location. (It will list down all active location)    | Able to filter and search patient name by dispensing location   |
| c            | Patient Name        | Patient Name  | Allow to search by entering fully or partially search criteria of patient's name  |
| d            | Order Type          | -All<br>-Normal<br>-SPUB<br>-Discharge<br>-Referred Patient     | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br>Normal – Prescription from normal order<br>SPUB - Prescription from SPUB order<br>Discharge - Prescription from Discharge order<br>Referred Patient – Prescription from referred patient |
| e            | MRN                 | Patient MRN   | Allow to search by entering fully or partially search criteria of MRN No  |
| f            | Order Status        | -All<br>-New Order<br>-Partial Supply<br>-Pending Authorisation | All – Type of search from range New order, Partial Supply and Pending Authorisation<br>New Order – Prescription of new order<br>Partial Supply – Prescription from partially dispense<br>- Pending Authorisation – Prescription contain of drug to authorize            |

| Advance Search |                     |   |   |
|----------------|---------------------|---|---|
| g              | Order Location      | Order location. (It will list down all active location)                 |   |
| h              | Order Location Type | - All<br>- Clinic<br>- Day Care<br>- ER<br>- Nursing Unit<br>- Pharmacy |   |
| i              | Order Date From     |   | Start point for range of order date   |
| j              | Order Date To       |   | Order Date To can be NULL or must be greater than the value for Order Date From |
| k              | Bed                 |   | Search patient by bed number  |
| l              | Recorded by         |   | Search patient by recorded by name  |

**Table 3.3**

**STEP 1**

Click on 'Dispensing' sub menu

**STEP 2**

Search existing patient record as follow:

**a) Dispensing Location**

**b) Order Location Type**

**c) Mode of Services**

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

**d) Patient Name**

**e) MRN**

**f) Order Status**

- All
- New Order
- Partial Supply

**g) Order Location**

**h) IC No/Other Identification**

**i) Order Type**

- All
- Normal
- SPUB
- Discharge

**j) Acknowledged without patient arrival**

**k) Next Dispense At**

**STEP 3**

Click on the button to search the patient

**STEP 4**

Double click on the selected patient's name

**PHARMACY ORDER**

Next Collection Date:  Next Collection Mode: Normal Collection Next Collection Location: Farmasi Bekalan Wad Radioter

Next Dispense At:  Medication Counselling  MTAC Order  Print Original Prescription  CP4

Dispense At: Pharmacy Counter  Remarks:

Current Collection Mode: Normal Collection  Drug Counselling Required?

**PRESCRIPTION**

|                          | Drug Name                   | Order Detail  | Order Qty | Prev Disp Qty | Reserve Qty                     | POMs Received | Dispense UOM Qty   | Balance              | Remarks | Drug Counselling                | Extemporaneo | Prescriber Name  |
|--------------------------|-----------------------------|---|-----------|---------------|---------------------------------|---------------|--------------------|----------------------|---------|---------------------------------|--------------|------------------|
| <input type="checkbox"/> | Salbutamol 2 mg Tablet      | 2 mg, TID, Oral, 7 Days<br>23/06/2021 12:17 PM - 30/06/2021 12:17 PM    | 21 tablet | 0 tablet      | 0 <input type="checkbox"/> POMs | 0 tablet      | 0 pck of 30 tablet | 21 tablet (7 day(s)) | Remarks | <input type="checkbox"/> Detail |              |                  |
| <input type="checkbox"/> | Vitamin B1, B6, B12 Tablet  | 1 tablet, OD, Oral, 7 Days<br>23/06/2021 12:21 PM - 30/06/2021 12:21 PM | 7 tablet  | 0 tablet      | 0 <input type="checkbox"/> POMs | 0 tablet      | 0 tablet           | 7 tablet (7 day(s))  | Remarks | <input type="checkbox"/> Detail |              |                  |
| <input type="checkbox"/> | Ascorbic Acid 100 mg Tablet | 100 mg, OD, Oral, 7 Days<br>23/06/2021 12:20 PM - 30/06/2021 12:20 PM   | 7 tablet  | 0 tablet      | 7 <input type="checkbox"/> POMs | 0 tablet      | 7 tablet           | 0 tablet (0 day(s))  | Remarks | <input type="checkbox"/> Detail |              | DR G. Yogeswaran |

Figure 3.3-2 Dispensing

**STEP 5**

Click on the button

**CONFIRMATION**

CONF0064: Do you want to dispense now?

Figure 3.3-3 Confirmation Alert Message

**STEP 6**

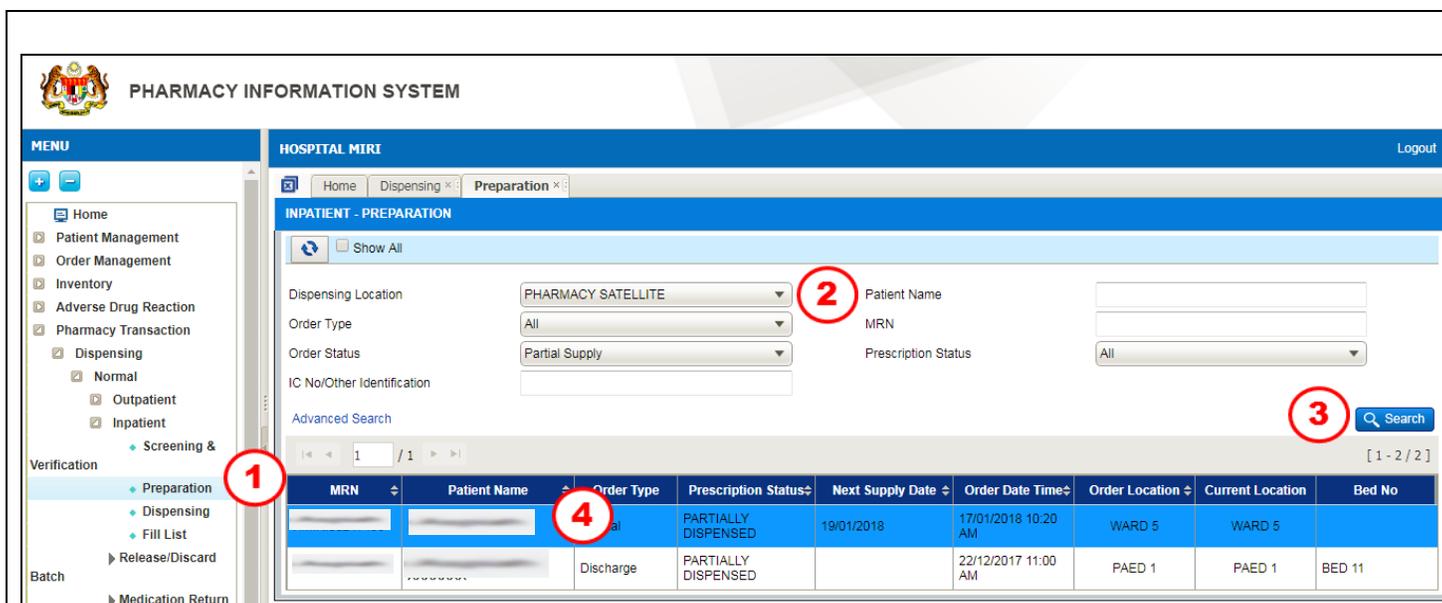
Click on the  button to confirm dispensing proceed and dispensing screen will automatically closed

**Note**

- To close/complete medication, select the  **Complete** checkbox then click on the button. The selected drug will be treat as fully supply.
- button added at Dispensing screen and Single Stage screen as per Figure 3.3-2. Once click on the button, Medication Counselling Order screen will appear.
- button added at Dispensing screen and Single Stage screen as per Figure 3.3-2. Once click on the button, MTAC Order screen will appear.

### 3.4 Partial Supply Normal Dispensing

This function is used for inpatient pharmacy to prepare and dispense the balance medication. Unlike Outpatient, Inpatient Partial Supply Dispensing starts directly from Preparation Screen.



| MRN | Patient Name | Order Type | Prescription Status | Next Supply Date | Order Date Time     | Order Location | Current Location | Bed No |
|-----|--------------|------------|---------------------|------------------|---------------------|----------------|------------------|--------|
|     |              | Normal     | PARTIALLY DISPENSED | 19/01/2018       | 17/01/2018 10:20 AM | WARD 5         | WARD 5           |        |
|     |              | Discharge  | PARTIALLY DISPENSED |                  | 22/12/2017 11:00 AM | PAED 1         | PAED 1           | BED 11 |

Figure 3.4.1-1 Preparation Listing Page

#### STEP 1

Click on 'Preparation' sub menu

#### STEP 2

Search existing patient record as follow:

**i) Dispensing Location**

**j) Order Type**

- All
- Normal
- SPUB
- Discharge

**k) Mode of Services**

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

**l) Patient Name**

**m) MRN**

**n) Order Status**

- All
- New Order
- Partial Supply

**Note**

Advanced Search

can be used to narrow down the criteria. It is consist of :

- a) Order Location
- b) Order Location Type
- c) Order Date From
- d) Order Date To
- e) Next Supply From
- f) Next Supply To
- g) Bed No
- h) Next Dispense At

**STEP 3**

Click on the  button to search the patient

**STEP 4**

Double click on the selected patient's name

**Note**

On this listing page, various Search criteria as below:

| Basic Search |                     |   |   |
|--------------|---------------------|---|---|
| No           | Field               | Description   | Remark  |
| a            | Show All            |   | Able to view all patient record   |
| b            | Dispensing Location | Dispensing location. (It will list down all active location)    | Able to filter and search patient name by dispensing location   |
| c            | Patient Name        | Patient Name  | Allow to search by entering fully or partially search criteria of patient's name  |
| d            | Order Type          | -All<br>-Normal<br>-SPUB<br>-Discharge<br>-Referred Patient     | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br>Normal – Prescription from normal order<br>SPUB - Prescription from SPUB order<br>Discharge - Prescription from Discharge order<br>Referred Patient – Prescription from referred patient |
| e            | MRN                 | Patient MRN   | Allow to search by entering fully or partially search criteria of MRN No  |
| f            | Order Status        | -All<br>-New Order<br>-Partial Supply<br>-Pending Authorization | All – Type of search from range New order, Partial Supply and Pending Authorization<br>New Order – Prescription of new order<br>Partial Supply – Prescription from partially dispense<br>Pending Authorization – Prescription contain of drug to authorize              |

| Advance Search |                     |   |   |
|----------------|---------------------|---|---|
| g              | Order Location      | Order location. (It will list down all active location)           |   |
| h              | Order Location Type | -All<br>-Clinic<br>-Day Care<br>-ER<br>-Nursing Unit<br>-Pharmacy |   |
| i              | Order Date From     |   | Start point for range of order date   |
| j              | Order Date To       |   | Order Date To can be NULL or must be greater than the value for Order Date From |
| k              | Bed                 |   | Search patient by bed number  |
| l              | Recorded by         |   | Search patient by recorded by name  |

Table 3.4.1

The screenshot shows the 'PREPARATION' screen in the PHIS system. At the top, there are navigation buttons: Patient Label, Record Prescription, Fill List, Print Original Prescription, PCI, CP4. Below this is a patient information section with fields for Mykad, Age (37 Years 10 Months 27 Days), Gender (Male), MRN (HKL00235253), Address, Phone And Email, Diagnosis, and No known Allergies. There are also fields for Height, Weight, BMI/BSA, and Nationality (Warganegara). Below the patient info is a 'PHARMACY ORDER' section with 'Supply Duration' set to 1 Day and 'Next Collection Location' set to Farmasi Pesakit Dalam. A '6' is circled around the 'PUB SPUB R1 Form' button. Below that is a 'PRESCRIPTION' section with various menu options like Invoice, Worksheet, Balance Medication Sheet, Patient sticker, Label, IP Label, OP Label, Full Supply, and an 'Allocate' button circled with a '7'. A table of prescriptions follows, with columns for Drug Name, Order Detail, Order Qty, Prev Disp Qty, Reserve Qty, POMs Received, Dispense UOM Qty, Balance, Remarks, Drug Counselling, and External. The first row shows Paracetamol 500 mg Tablet (32 tablet) and the second row shows Simvastatin 10 mg Tablet (3 tablet). A '5' is circled around the 'Allocate' button in the table header. At the bottom right, there is a 'Prescrib Name' column with a '7' circled around it.

Figure 3.4.1-2 Preparation Screen

**STEP 5**

Allocate by clicking the  button or allocate manually at the Reserve Quantity hyperlink. Refer step in Allocate Quantity.

**STEP 6**

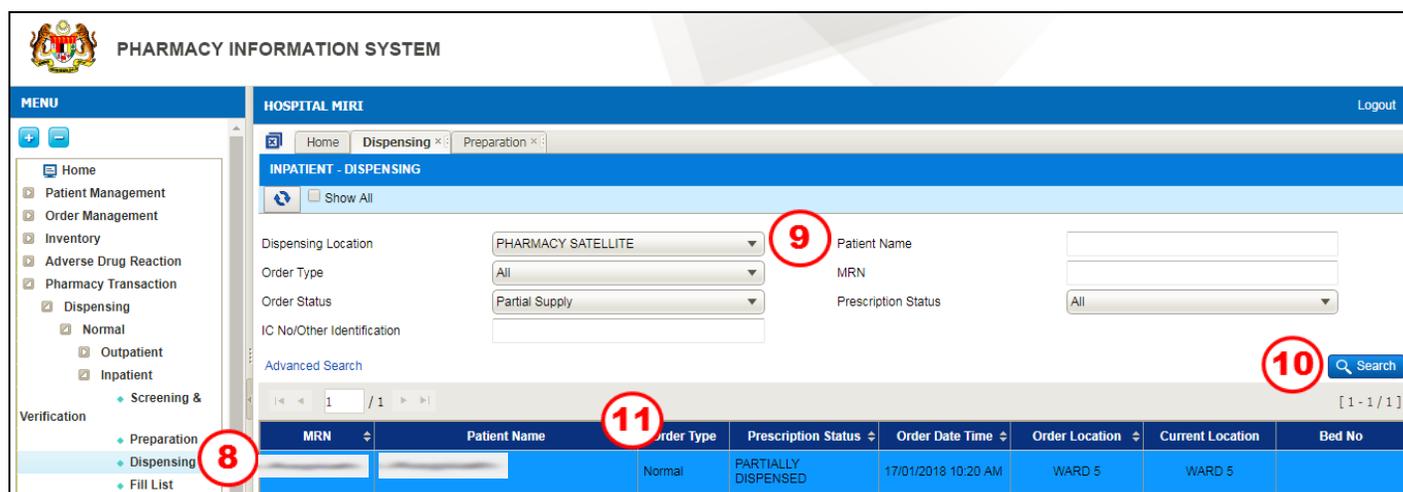
Click on the  button to reprint drug label. Refer steps in Label

**Note**

Click at  button to directly link to PCI screen

**STEP 7**

Click on the  button



**PHARMACY INFORMATION SYSTEM**

HOSPITAL MIRI

Logout

Home Dispensing Preparation

INPATIENT - DISPENSING

Show All

Dispensing Location: PHARMACY SATELLITE

Order Type: All

Order Status: Partial Supply

IC No/Other Identification:

Patient Name:

MRN:

Prescription Status: All

Advanced Search

1 / 1

Search

| MRN | Patient Name | Order Type | Prescription Status | Order Date Time     | Order Location | Current Location | Bed No |
|-----|--------------|------------|---------------------|---------------------|----------------|------------------|--------|
|     |              | Normal     | PARTIALLY DISPENSED | 17/01/2018 10:20 AM | WARD 5         | WARD 5           |        |

Figure 3.4.1-3 Dispensing Screen

**Note**

Various search criteria for Patient is provided as below:

| Basic Search   |                     |   |   |
|----------------|---------------------|---|---|
| No             | Field               | Description   | Remark  |
| a              | Show All            |   | Able to view all patient record   |
| b              | Dispensing Location | Dispensing location. (It will list down all active location)    | Able to filter and search patient name by dispensing location   |
| c              | Patient Name        | Patient Name  | Allow to search by entering fully or partially search criteria of patient's name  |
| d              | Order Type          | -All<br>-Normal<br>-SPUB<br>-Discharge<br>-Referred Patient     | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br>Normal – Prescription from normal order<br>SPUB - Prescription from SPUB order<br>Discharge - Prescription from Discharge order<br>Referred Patient – Prescription from referred patient |
| e              | MRN                 | Patient MRN   | Allow to search by entering fully or partially search criteria of MRN No  |
| f              | Order Status        | -All<br>-New Order<br>-Partial Supply<br>-Pending Authorisation | All – Type of search from range New order, Partial Supply and Pending Authorisation<br>New Order – Prescription of new order<br>Partial Supply – Prescription from partially dispense<br>- Pending Authorisation – Prescription contain of drug to authorize            |
| Advance Search |                     |   |   |

|   |                     |   |   |
|---|---------------------|---|---|
| g | Order Location      | Order location. (It will list down all active location)                 |   |
| h | Order Location Type | - All<br>- Clinic<br>- Day Care<br>- ER<br>- Nursing Unit<br>- Pharmacy |   |
| i | Order Date From     |   | Start point for range of order date   |
| j | Order Date To       |   | Order Date To can be NULL or must be greater than the value for Order Date From |
| k | Bed                 |   | Search patient by bed number  |
| l | Recorded by         |   | Search patient by recorded by name  |

**Table 3.4-2**

**STEP 8**

Click on 'Dispensing' sub menu

**STEP 9**

Search existing patient record as follow:

**a) Dispensing Location**

**b) Order Location Type**

**c) Mode of Services**

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

**d) Patient Name**

**e) MRN**

**f) Order Status**

- All
- New Order
- Partial Supply

**g) Order Location**

**h) IC No/Other Identification**

**i) Order Type**

- All
- Normal
- SPUB
- Discharge

**j) Acknowledged without patient arrival**

**STEP 10**

Click on the  button to search the patient

**STEP 11**

Click on the selected patient's name and Figure 3.4.1-4

|                          | Drug Name                   | Order Detail  | Order Qty | Prev Disp Qty | Reserve Qty                     | POMs Received | Disperse UOM Qty   | Balance              | Remarks | Drug Counselling                | Extemporaneous | Patient Name |
|--------------------------|-----------------------------|---|-----------|---------------|---------------------------------|---------------|--------------------|----------------------|---------|---------------------------------|----------------|--------------|
| <input type="checkbox"/> | Salbutamol 2 mg Tablet      | 2 mg, TID, Oral, 7 Days<br>23/06/2021 12:17 PM - 30/06/2021 12:17 PM    | 21 tablet | 0 tablet      | 0 <input type="checkbox"/> POMs | 0 tablet      | 0 pck of 30 tablet | 21 tablet (7 day(s)) | Remarks | <input type="checkbox"/> Detail |                |              |
| <input type="checkbox"/> | Vitamin B1, B6, B12 Tablet  | 1 tablet, OD, Oral, 7 Days<br>23/06/2021 12:21 PM - 30/06/2021 12:21 PM | 7 tablet  | 0 tablet      | 0 <input type="checkbox"/> POMs | 0 tablet      | 0 tablet           | 7 tablet (7 day(s))  | Remarks | <input type="checkbox"/> Detail |                |              |
| <input type="checkbox"/> | Ascorbic Acid 100 mg Tablet | 100 mg, OD, Oral, 7 Days<br>23/06/2021 12:20 PM - 30/06/2021 12:20 PM   | 7 tablet  | 0 tablet      | 7 <input type="checkbox"/> POMs | 0 tablet      | 7 tablet           | 0 tablet (0 day(s))  | Remarks | <input type="checkbox"/> Detail |                |              |

Figure 3.4.1-4 Dispensing Screen

**STEP 12**

Click on the button

Figure 3.4.1-5 Confirmation Alert Message

**STEP 13**

Click on the button to confirm dispensing proceed and dispensing screen will automatically closed

**Note**

- To close/complete medication, select the  checkbox then click on the button. The selected drug will be treat as fully supply.
- button added at Dispensing screen and Single Stage screen. Once click on the button, Medication Counselling Order screen will appear.
- button added at Dispensing screen and Single Stage screen as per Figure 3.3-2. Once click on the button, MTAC Order screen will appear.
- A notification icon in the Remarks column is display if there are past Remarks in all dispensing screens.

User will be able to view past Remarks (with timestamp & NAME OF PERSON making remark), including the doctor's remark as per Figure 3.4.1-6

**PHARMACIST REMARK**

Prescriber Remark

|             |                                |
|-------------|--------------------------------|
| Order Stage | to dilute and serve to patient |
|-------------|--------------------------------|

Pharmacist Remark

|                    |  |
|--------------------|--|
| Verification Stage |  |
| Preparation Stage  |  |

**DRUG REMARKS HISTORY (ACETYLSALICYLIC ACID 300 MG SOLUBLE TABLET)**

| Prescriber Remark         | Prescriber Name | Start Date | End Date   |  |
|---------------------------|-----------------|------------|------------|--|
| given for pain management |                 | 24/10/2019 | 29/10/2019 |  |

| Pharmacist Remark                | Stage        | Rx                | Date Time              |
|----------------------------------|--------------|-------------------|------------------------|
| for pain                         | Dispensing   | AE_DEPT0000741085 | 24/10/2019 03:29:19 PM |
| to proceed                       | Preparation  | AE_DEPT0000741085 | 24/10/2019 03:28:13 PM |
| to proceed with IP order as well | Verification | AE_DEPT0000741085 | 24/10/2019 03:27:14 PM |
| supplied to ward for patient     | Dispensing   | NW18B0000741084   | 24/10/2019 02:53:53 PM |
| extemporaneous prepared          | Preparation  | NW18B0000741084   | 24/10/2019 02:53:06 PM |

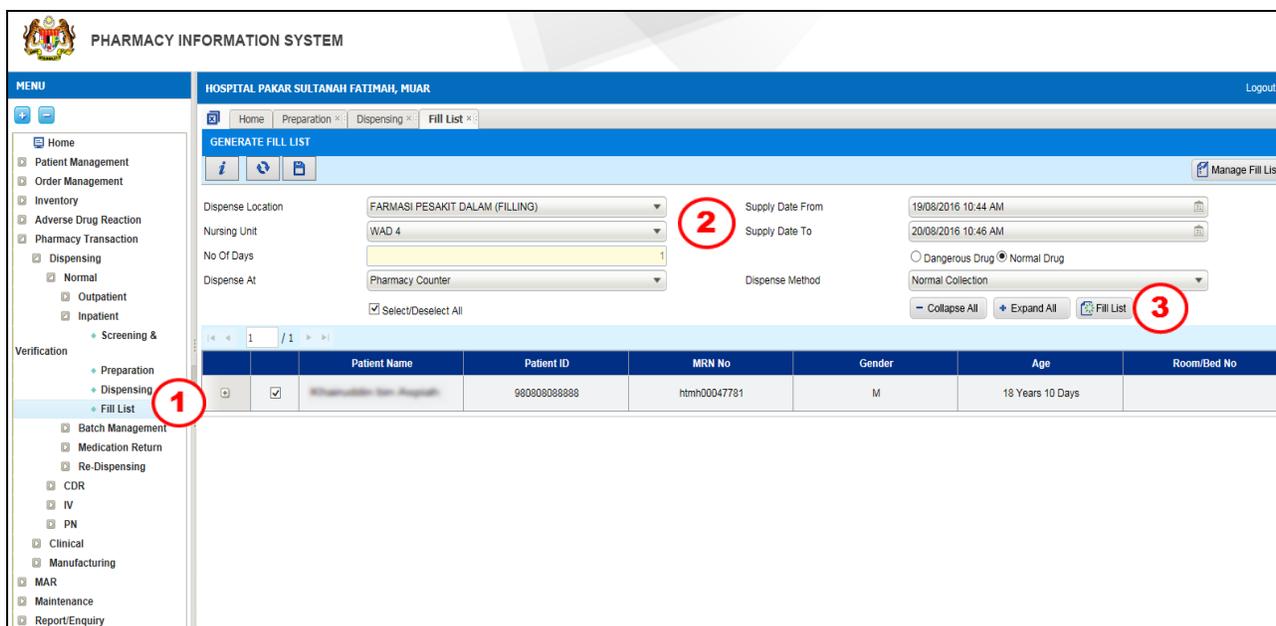
Figure 3.4.1-6 Pharmacist Remark Screen

### 3.5 Partial Supply Fill List

This function is used for inpatient pharmacy to prepare and dispense medication by ward. The user has to generate and manage the fill list in order to complete the dispensing process.

#### 3.5.1 Generate Fill List

Generate Fill List screen allow user to retrieve patient by ward, view prescription, allocate Qty, edit label, print original prescription and generate fill list.



| Patient Name         | Patient ID  | MRN No     | Gender | Age              | Room/Bed No |
|----------------------|-------------|------------|--------|------------------|-------------|
| Wahabudin bin Asyraf | 98080808888 | hth0047781 | M      | 18 Years 10 Days |             |

Figure 3.5.1-1 Fill List Listing Page

#### STEP 1

Click 'Fill List' in sub menu 'Inpatient'

#### STEP 2

Search existing patient record as follow:

- Dispensing Location
- Nursing Unit
- Supply Date From
- Supply Date To

#### Note

- User Able to select **Dangerous Drug or Normal Drug** and generate Fill List.
- Supply Date From** and **Supply Date To** will be auto captured by default date and able to edit by user

#### STEP 3

Tick on the  button to view patient by ward.

HOSPITAL KUALA LUMPUR Logout

Home Preparation **Fill List**

**GENERATE FILL LIST**

Dispense Location: Farmasi Pesakit Dalam      Supply Date From: 28/10/2019 03:33 PM  
 Nursing Unit: Wad NW18B (Perubatan)      Supply Date To: 29/10/2019 03:34 PM  
 No Of Days: 2       Dangerous Drug  Normal Drug  
 Dispense At: Pharmacy Counter      Dispense Method: Normal Collection  
 Select/Deselect All     

[ 1 - 2 / 2 ]

|                                     | Patient Name | Patient ID | MRN No      | Gender | Age                        | Room/Bed No |
|-------------------------------------|--------------|------------|-------------|--------|----------------------------|-------------|
| <input checked="" type="checkbox"/> | [REDACTED]   | [REDACTED] | HKL00235267 | M      | 47 Years 11 Months 13 Days |             |
| <input checked="" type="checkbox"/> | [REDACTED]   | [REDACTED] | HKL00235267 | M      | 47 Years 11 Months 13 Days |             |

**Figure 3.5.1-2 Select / Deselect Patient Prescription**

**STEP 4**

Select the checkbox to include the patient prescription for generated fill list else deselect the checkbox to exclude the patient prescription patient from the fill list

**GENERATE FILL LIST**

Dispense Location: FARMASI BEKALAN WAD      Supply Date From: 03/10/2019 03:06 PM  
 Nursing Unit: WAD 10 (MED - P)      Supply Date To: 06/10/2019 03:06 PM  
 No Of Days: 3       Dangerous Drug  Normal Drug  
 Dispense At: Pharmacy Counter      Dispense Method: Normal Collection  
 Select/Deselect All     

[ 1 - 2 / 2 ]

|                                     | Patient Name | Patient ID     | MRN No                   | Gender   | Age                        | Room/Bed No |             |                   |                    |
|-------------------------------------|--------------|----------------|--------------------------|--|----------------------------|-------------|-------------|-------------------|--------------------|
| <input checked="" type="checkbox"/> | [REDACTED]   | [REDACTED]     | HPSF00000020             | F  | 18 Years 05 Months 25 Days |             |             |                   |                    |
| <input checked="" type="checkbox"/> |              |                |                          |  |                            |             |             |                   |                    |
|                                     | Rx Date      | Rx No          | Drug Name                | Order Detail   | Authorise Status           | Order Qty   | Reserve Qty | Previous Disp Qty | Last Dispense Date |
| <input checked="" type="checkbox"/> | 01/10/2019   | WRD87100018177 | Simvastatin 10 mg Tablet | 10 mg, ON, Oral, 7 Days<br>01/10/2019 04:57 PM - 08/10/2019 04:57 PM |                            | 7           | 3           | 0                 |                    |
| <input checked="" type="checkbox"/> | [REDACTED]   | [REDACTED]     | [REDACTED]               | [REDACTED]   | [REDACTED]                 | [REDACTED]  | [REDACTED]  | [REDACTED]        | [REDACTED]         |
|                                     |              |                | HPSF00268221             | F  | 32 Years 01 Months 13 Days |             |             |                   |                    |

**Figure 3.5.1-3 Select / Deselect Drug**

**Note**

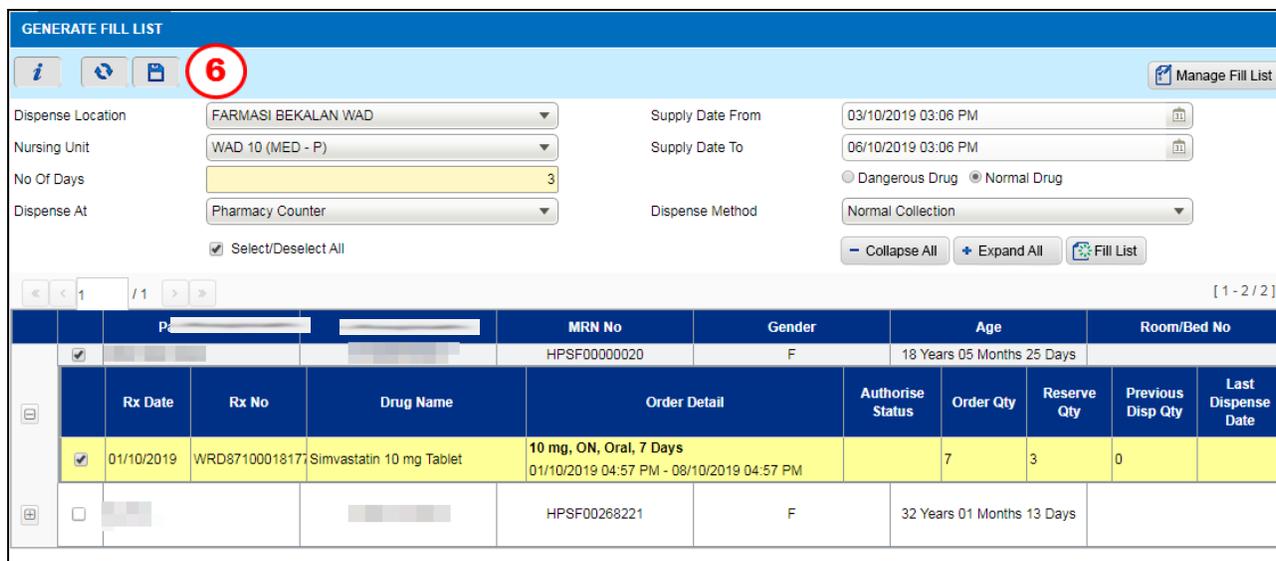
Authorise status will appear in the details next to order detail as Figure 3.5.1-3.

**STEP 5**

Click on the  button to expand the patient prescription, select the checkbox to exclude the drug from the fill list or else remain selected if the drug included in the fill list

**Note**

By default, all patient will selected.



**GENERATE FILL LIST**

Dispense Location: FARMASI BEKALAN WAD  
 Nursing Unit: WAD 10 (MED - P)  
 No Of Days: 3  
 Dispense At: Pharmacy Counter

Supply Date From: 03/10/2019 03:06 PM  
 Supply Date To: 06/10/2019 03:06 PM  
 Dispense Method: Normal Collection

Select/Deselect All

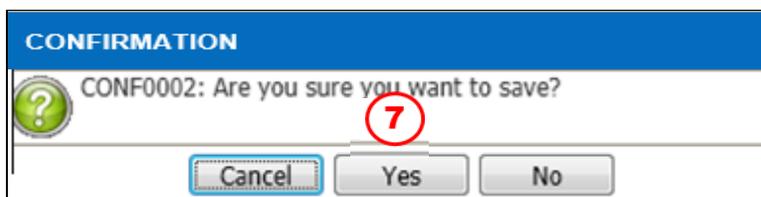
[- Collapse All] [+ Expand All] [Fill List] [Manage Fill List]

| P                                   | MRN No       | Gender         | Age                        | Room/Bed No  |           |             |                   |                    |
|-------------------------------------|--------------|----------------|----------------------------|--|-----------|-------------|-------------------|--------------------|
| <input checked="" type="checkbox"/> | HPSF0000020  | F              | 18 Years 05 Months 25 Days |  |           |             |                   |                    |
| Rx Date                             | Rx No        | Drug Name      | Order Detail               | Authorise Status   | Order Qty | Reserve Qty | Previous Disp Qty | Last Dispense Date |
| <input checked="" type="checkbox"/> | 01/10/2019   | WRD87100018177 | Simvastatin 10 mg Tablet   | 10 mg, ON, Oral, 7 Days<br>01/10/2019 04:57 PM - 08/10/2019 04:57 PM |           | 7           | 3                 | 0                  |
| <input type="checkbox"/>            |              |                |                            |  |           |             |                   |                    |
|                                     | HPSF00268221 | F              | 32 Years 01 Months 13 Days |  |           |             |                   |                    |

Figure 3.5.1-4 Generate Fill List

**STEP 6**

Click on the  button to save record



**CONFIRMATION**

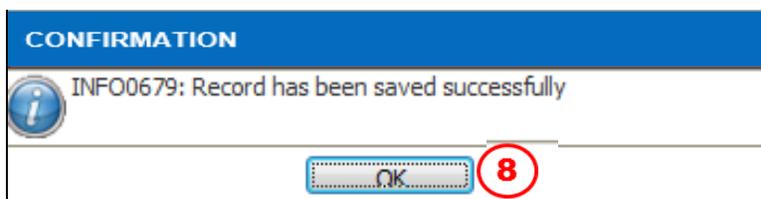
CONF0002: Are you sure you want to save?

[Cancel] [Yes] [No]

Figure 3.5.1-5 Confirmation Alert Message

**STEP 7**

Click  button to confirm save record and fill list screen will automatically closed



**CONFIRMATION**

INFO0679: Record has been saved successfully

[OK]

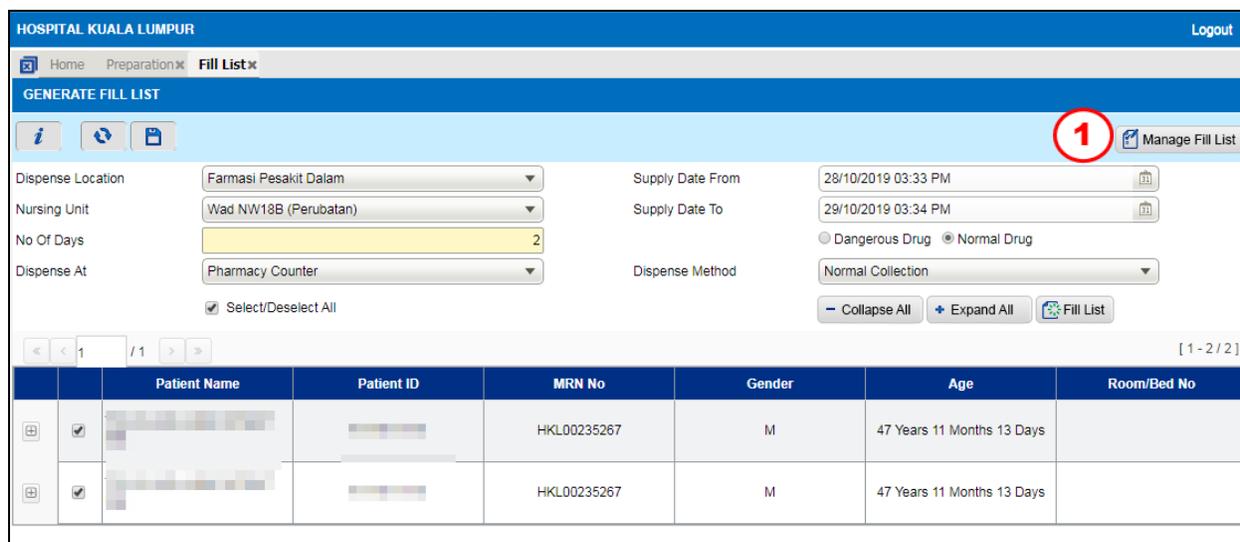
Figure 3.5.1-6 Information Alert Message

**STEP 8**

Click on the  button to save record

### 3.5.2 Manage Fill List

This function is used to dispense drugs base on the generated fill list by nursing unit, also able to print label and prescription fill list.



**HOSPITAL KUALA LUMPUR** Logout

Home Preparation **Fill List**

**GENERATE FILL LIST**

1

Dispense Location: Farmasi Pesakit Dalam  
 Nursing Unit: Wad NW18B (Perubatan)  
 No Of Days: 2  
 Dispense At: Pharmacy Counter  
 Select/Deselect All

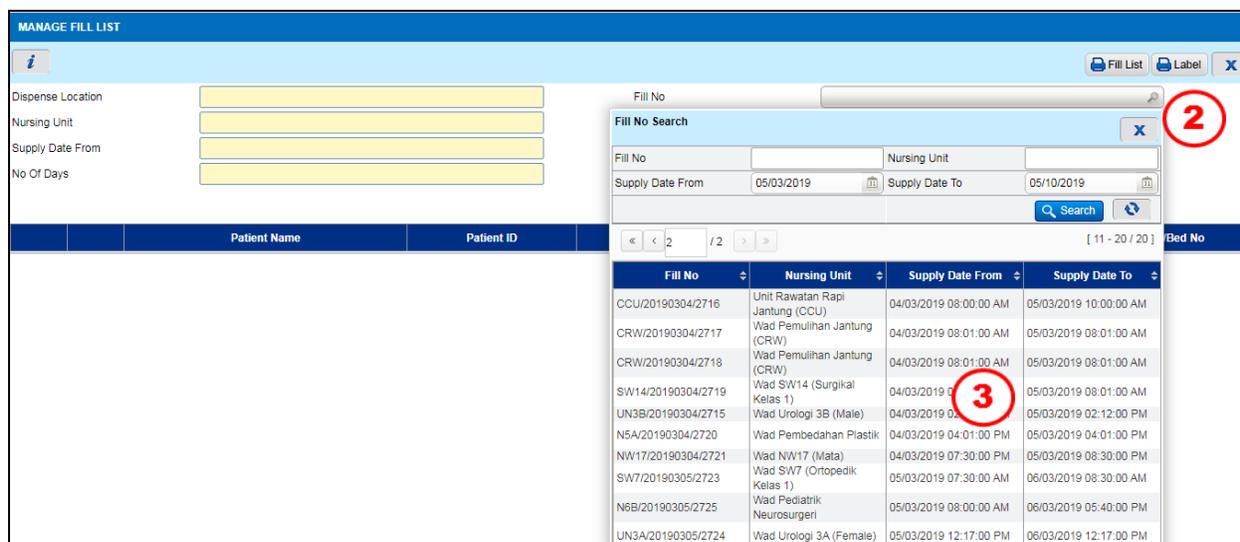
Supply Date From: 28/10/2019 03:33 PM  
 Supply Date To: 29/10/2019 03:34 PM  
 Dangerous Drug  Normal Drug  
 Dispense Method: Normal Collection

|                          |                                     | Patient Name | Patient ID | MRN No      | Gender | Age                        | Room/Bed No |
|--------------------------|-------------------------------------|--------------|------------|-------------|--------|----------------------------|-------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | [blurred]    | [blurred]  | HKL00235267 | M      | 47 Years 11 Months 13 Days |             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | [blurred]    | [blurred]  | HKL00235267 | M      | 47 Years 11 Months 13 Days |             |

Figure 3.5.2-1 Manage Fill List

**STEP 1**

Click on the  button to proceed Manage Fill List process



**MANAGE FILL LIST**

Dispense Location: [input]  
 Nursing Unit: [input]  
 Supply Date From: [input]  
 No Of Days: [input]

Fill No: [input]

**Fill No Search**  2

Fill No: [input] Nursing Unit: [input]  
 Supply Date From: 05/03/2019 Supply Date To: 05/10/2019

| Fill No            | Nursing Unit                    | Supply Date From       | Supply Date To         |
|--------------------|---------------------------------|------------------------|------------------------|
| CCU/20190304/2716  | Unit Rawatan Rapi Jantung (CCU) | 04/03/2019 08:00:00 AM | 05/03/2019 10:00:00 AM |
| CRW/20190304/2717  | Wad Pemulihan Jantung (CRW)     | 04/03/2019 08:01:00 AM | 05/03/2019 08:01:00 AM |
| CRW/20190304/2718  | Wad Pemulihan Jantung (CRW)     | 04/03/2019 08:01:00 AM | 05/03/2019 08:01:00 AM |
| SW14/20190304/2719 | Wad SW14 (Surgikal Kelas 1)     | 04/03/2019 08:01:00 AM | 05/03/2019 08:01:00 AM |
| UN3B/20190304/2715 | Wad Urologi 3B (Male)           | 04/03/2019 08:01:00 AM | 05/03/2019 02:12:00 PM |
| N5A/20190304/2720  | Wad Pembedahan Plastik          | 04/03/2019 04:01:00 PM | 05/03/2019 04:01:00 PM |
| NW17/20190304/2721 | Wad NW17 (Mata)                 | 04/03/2019 07:30:00 PM | 05/03/2019 08:30:00 PM |
| SW7/20190305/2723  | Wad SW7 (Ortopedik Kelas 1)     | 05/03/2019 07:30:00 AM | 06/03/2019 08:30:00 AM |
| N6B/20190305/2725  | Wad Pediatrik Neurosurgeri      | 05/03/2019 08:00:00 AM | 06/03/2019 05:40:00 PM |
| UN3A/20190305/2724 | Wad Urologi 3A (Female)         | 05/03/2019 12:17:00 PM | 06/03/2019 12:17:00 PM |

3

Figure 3.5.2-2 Manage Fill List

**STEP 2**

Click on the  button to search the fill list

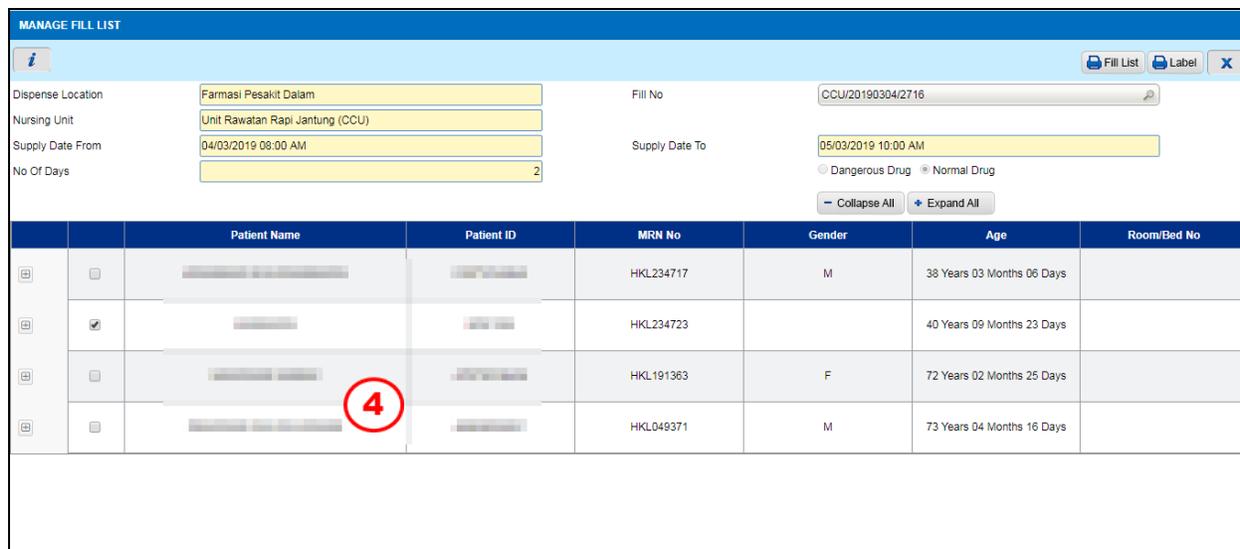
**Note**

Allow and able to search fill list based:-

- a) Fill No
- b) Nursing Unit
- c) Supply Date From
- d) Supply Date To

**STEP 3**

Double click on the selected fill list



**MANAGE FILL LIST**

Dispense Location: Farmasi Pesakit Dalam | Fill No: CCU/20190304/2716  
 Nursing Unit: Unit Rawatan Rapi Jantung (CCU)  
 Supply Date From: 04/03/2019 08:00 AM | Supply Date To: 05/03/2019 10:00 AM  
 No Of Days: 2 | Radio buttons: Dangerous Drug, Normal Drug

|                          |                                     | Patient Name | Patient ID | MRN No    | Gender | Age                        | Room/Bed No |
|--------------------------|-------------------------------------|--------------|------------|-----------|--------|----------------------------|-------------|
| <input type="checkbox"/> | <input type="checkbox"/>            | [REDACTED]   | [REDACTED] | HKL234717 | M      | 38 Years 03 Months 06 Days |             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | [REDACTED]   | [REDACTED] | HKL234723 |        | 40 Years 09 Months 23 Days |             |
| <input type="checkbox"/> | <input type="checkbox"/>            | [REDACTED]   | [REDACTED] | HKL191363 | F      | 72 Years 02 Months 25 Days |             |
| <input type="checkbox"/> | <input type="checkbox"/>            | [REDACTED]   | [REDACTED] | HKL049371 | M      | 73 Years 04 Months 16 Days |             |

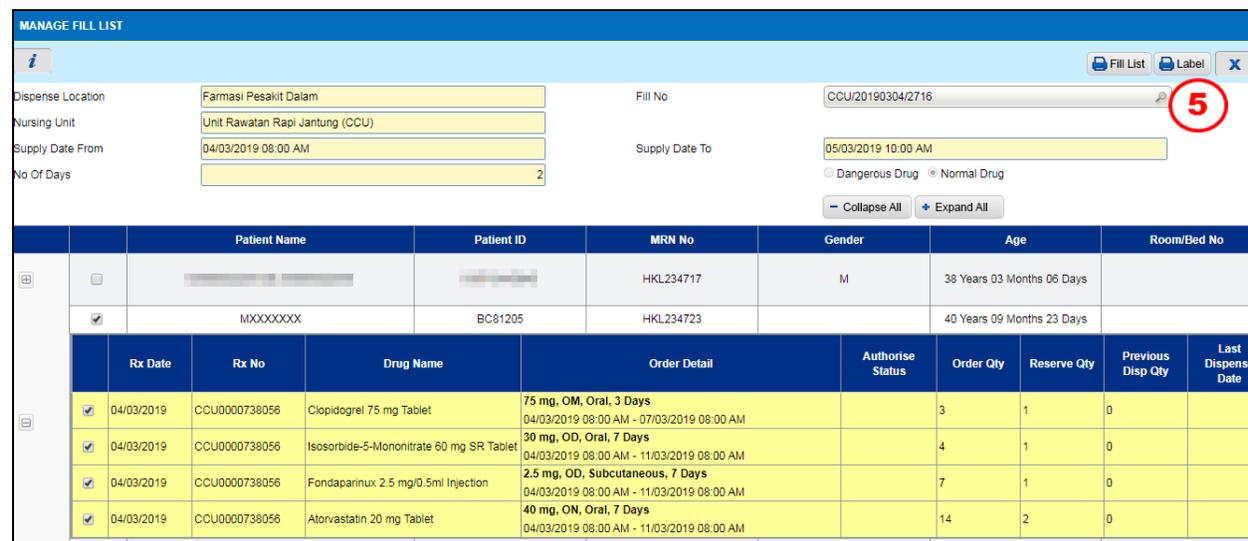
**Figure 3.5.2-3 Manage Fill List**

**STEP 4**

Select on the checkbox to print the drug label

**STEP 5**

Click on the  to view or edit drug label

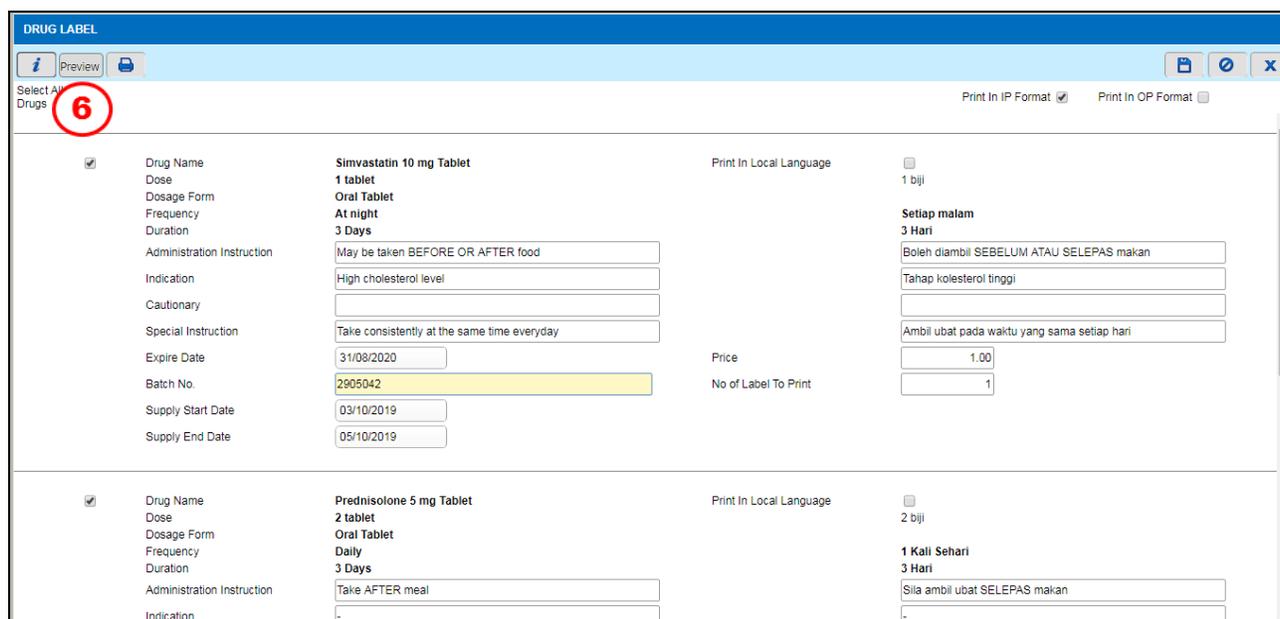


**MANAGE FILL LIST**

Dispense Location: Farmasi Pesakit Dalam | Fill No: CCU/20190304/2716  
 Nursing Unit: Unit Rawatan Rapi Jantung (CCU)  
 Supply Date From: 04/03/2019 08:00 AM | Supply Date To: 05/03/2019 10:00 AM  
 No Of Days: 2 | Radio buttons: Dangerous Drug, Normal Drug

|                                     |                                     | Patient Name  | Patient ID                               | MRN No  | Gender           | Age                        | Room/Bed No |                   |                    |
|-------------------------------------|-------------------------------------|---------------|--|---|------------------|----------------------------|-------------|-------------------|--------------------|
| <input type="checkbox"/>            | <input type="checkbox"/>            | [REDACTED]    | [REDACTED]                               | HKL234717   | M                | 38 Years 03 Months 06 Days |             |                   |                    |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | MXXXXXX       | BC81205                                  | HKL234723   |                  | 40 Years 09 Months 23 Days |             |                   |                    |
|                                     |                                     |               |  |   |                  |                            |             |                   |                    |
|                                     | Rx Date                             | Rx No         | Drug Name                                | Order Detail  | Authorise Status | Order Qty                  | Reserve Qty | Previous Disp Qty | Last Dispense Date |
| <input checked="" type="checkbox"/> | 04/03/2019                          | CCU0000738056 | Clopidogrel 75 mg Tablet                 | 75 mg, OM, Oral, 3 Days<br>04/03/2019 08:00 AM - 07/03/2019 08:00 AM          |                  | 3                          | 1           | 0                 |                    |
| <input checked="" type="checkbox"/> | 04/03/2019                          | CCU0000738056 | Isosorbide-5-Mononitrate 60 mg SR Tablet | 30 mg, OD, Oral, 7 Days<br>04/03/2019 08:00 AM - 11/03/2019 08:00 AM          |                  | 4                          | 1           | 0                 |                    |
| <input checked="" type="checkbox"/> | 04/03/2019                          | CCU0000738056 | Fondaparinux 2.5 mg/0.5ml Injection      | 2.5 mg, OD, Subcutaneous, 7 Days<br>04/03/2019 08:00 AM - 11/03/2019 08:00 AM |                  | 7                          | 1           | 0                 |                    |
| <input checked="" type="checkbox"/> | 04/03/2019                          | CCU0000738056 | Atorvastatin 20 mg Tablet                | 40 mg, ON, Oral, 7 Days<br>04/03/2019 08:00 AM - 11/03/2019 08:00 AM          |                  | 14                         | 2           | 0                 |                    |

**Figure 3.5.2-4 Print Drug Label**



**DRUG LABEL**

Select All Drugs **6** Print In IP Format  Print In OP Format

|                                     |                            |   |                         |   |
|-------------------------------------|----------------------------|---|-------------------------|---|
| <input checked="" type="checkbox"/> | Drug Name                  | Simvastatin 10 mg Tablet                    | Print In Local Language | <input type="checkbox"/>                    |
|                                     | Dose                       | 1 tablet                                    |                         | 1 biji                                      |
|                                     | Dosage Form                | Oral Tablet                                 |                         |   |
|                                     | Frequency                  | At night                                    |                         | Setiap malam                                |
|                                     | Duration                   | 3 Days                                      |                         | 3 Hari                                      |
|                                     | Administration Instruction | May be taken BEFORE OR AFTER food           |                         | Boleh diambil SEBELUM ATAU SELEPAS makan    |
|                                     | Indication                 | High cholesterol level                      |                         | Tahap kolesterol tinggi                     |
|                                     | Cautionary                 |   |                         |   |
|                                     | Special Instruction        | Take consistently at the same time everyday |                         | Ambil ubat pada waktu yang sama setiap hari |
|                                     | Expire Date                | 31/08/2020                                  | Price                   | 1.00  |
|                                     | Batch No.                  | 2905042                                     | No of Label To Print    | 1   |
|                                     | Supply Start Date          | 03/10/2019                                  |                         |   |
|                                     | Supply End Date            | 05/10/2019                                  |                         |   |
| <input checked="" type="checkbox"/> | Drug Name                  | Prednisolone 5 mg Tablet                    | Print In Local Language | <input type="checkbox"/>                    |
|                                     | Dose                       | 2 tablet                                    |                         | 2 biji                                      |
|                                     | Dosage Form                | Oral Tablet                                 |                         |   |
|                                     | Frequency                  | Daily                                       |                         | 1 Kali Sehari                               |
|                                     | Duration                   | 3 Days                                      |                         | 3 Hari                                      |
|                                     | Administration Instruction | Take AFTER meal                             |                         | Sila ambil ubat SELEPAS makan               |
|                                     | Indication                 | -   |                         | -   |

Figure 3.5.2-5 Drug Label

#### STEP 6

Click on the  button to preview the drug label

#### Note

- Details as below will be auto generated in Drug Label:
  - a) Drug Name
  - b) Dose
  - c) Dosage Form
  - d) Frequency
  - e) Duration
  - f) Administration Instruction
  - g) Indication
  - h) Cautionary
  - i) Special Instruction,
  - j) Expiry Date
  - k) Batch No
- It is allowed to edit Administration, Indication, Special Instruction, Expiry Date, Batch No, Price, No of Label to Print and select Print in Local Language.
- Allowed to select to print label in IP format or OP format

|  |       |       |       |       |       |                     |
|--|-------|-------|-------|-------|-------|---------------------|
| <b>HOSPITAL PAKAR SULTANA FATIMAH, MUAR (Tel: 069521901)</b>                       |       |       |       |       |       |                     |
| 00000020                      WAD 10 (MED - P)                                     |       |       |       |       |       |                     |
| <b>Simvastatin 10mg Tab</b>  |       |       |       |       |       |                     |
| Take 1 tablet At night   |       |       |       |       |       |                     |
| -  |       |       |       |       |       |                     |
| May be taken BEFORE OR AFTER food.<br>Take consistently at the same time everyday. |       |       |       |       |       |                     |
| 03/10  | 04/10 | 05/10 | 06/10 | 07/10 | 08/10 |                     |
| <b>03/10/19 [3 day            3 tablet    RM1.00</b>                               |       |       |       |       |       |                     |
| UBAT TERKAWAL System Administrator   |       |       |       |       |       | 03/10/2019 03:25 PM |

Figure 3.5.2-6(a) Print Drug Label (IP)

|   |  |                                   |
|---|--|-----------------------------------|
| <b>HOSPITAL PAKAR SULTANA FATIMAH, MUAR (Tel: 069521901)</b>                      |  |                                   |
| 00000020                      WAD 10 (MED - P)                                    |  |                                   |
| <b>Simvastatin 10mg Tab</b>   |  |                                   |
| Take 1 tablet At night  |  |                                   |
| -   |  |                                   |
| May be taken BEFORE OR AFTER food<br>Take consistently at the same time everyday. |  |                                   |
| <b>High cholesterol level</b>   |  |                                   |
| 03/10/19-05/10/19 [3 day(s)]  |  | <b>3 tablet            RM1.00</b> |
| UBAT TERKAWAL JAUHI DARIPADA KANAK-KANAK  |  | 03/10/2019 03:26 PM               |

Figure 3.5.2-6(b) Print Drug Label (OP)

**STEP 7**

Click on the button to print the drug label

**MANAGE FILL LIST**

i

|                   |                      |                  |                     |
|-------------------|----------------------|------------------|---------------------|
| Dispense Location | UNIT FARMASI SATELIT | Fill No          | WAD 13/20140905/115 |
| Nursing Unit      | WAD 13 (O&G)         | Supply Date From | 05/09/2014 08:00 AM |
| Supply Date To    | 06/09/2014 08:00 AM  | No Of Days       | 1                   |

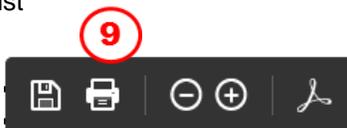
Dangerous Drug  Normal Drug

<< 1 / 1 >>

Figure 3.5.2-7 Print Fill List

**STEP 8**

Click on the  button to print the fill list



**KEMENTERIAN KESIHATAN MALAYSIA**  
**Hospital Pakar Sultanah Fatimah, Muar**

Nursing Unit From : WAD 10 (MED - P)      Date From : 03/10/2019 03:06 PM  
 Fill Process ID : WRD871/20191003/17682      Date To : 06/10/2019 03:06 PM  
 Fill Process Executed Date/Time : 03/10/2019 03:26 PM      Supply Duration : 3 days

| Fill Date                            | Rx Date    | Rx No            | Drug                        | Dose   | Route | Freq Code | Qty Reqd | Fill UOM | Batch ID | Expiry Date |
|--------------------------------------|------------|------------------|-----------------------------|--------|-------|-----------|----------|----------|----------|-------------|
| Patient Name / ID / MRN : ██████████ |            |                  | Room/Bed No : /             |        |       |           |          |          |          |             |
| 03/10/2019                           | 01/10/2019 | WRD8710001817771 | Simvastatin 10 mg Tablet    | 10 mg  | ORAL  | ON        | 3        | tablet   | 2905042  | 31/08/2020  |
| Patient Name / ID / MRN : ██████████ |            |                  | Room/Bed No : /             |        |       |           |          |          |          |             |
| 04/10/2019                           | 03/10/2019 | WRD8710001817772 | Prednisolone 5 mg Tablet    | 10 mg  | ORAL  | OD        | 6        | tablet   | 1807093  | 31/07/2021  |
| 03/10/2019                           | 03/10/2019 | WRD8710001817772 | Metronidazole 200 mg Tablet | 200 mg | ORAL  | Q8H       | 9        | tablet   | 17E191   | 31/03/2020  |

Collected By: \_\_\_\_\_      Dispensed By: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_      Checked By: \_\_\_\_\_

**Figure 3.5.2-8 Fill List**

**Note**

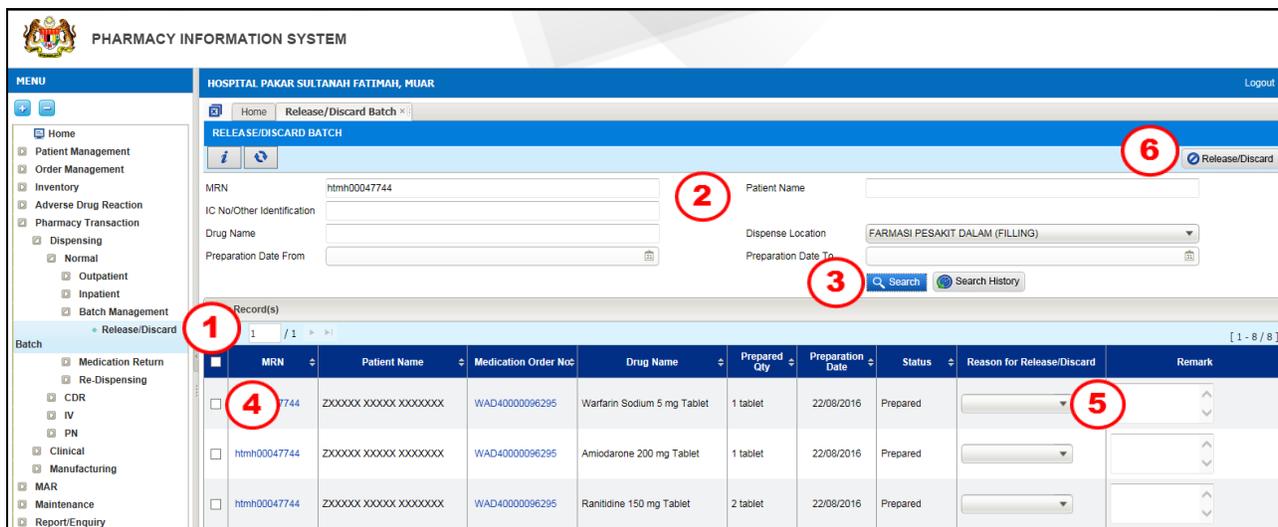
System will auto capture prepared by and checked by based on login id

**STEP 9**

Click on the  button to print the fill list

### 3.6 Released / Discard Batch

Released / Discard Batch screen is allow user to release any reserved / prepared drugs back into inventory. Released batch is only applicable for drug which is not in liquid form



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

Home Release/Discard Batch

RELEASE/DISCARD BATCH

MRN: htmh00047744 Patient Name: [ ]

IC No/Other Identification: [ ] Dispense Location: FARIMASI PESAKIT DALAM (FILLING)

Drug Name: [ ] Preparation Date From: [ ] Preparation Date To: [ ]

Search Search History

Record(s) 1 / 1

| Batch                    | MRN          | Patient Name          | Medication Order No | Drug Name                   | Prepared Qty | Preparation Date | Status   | Reason for Release/Discard | Remark |
|--------------------------|--------------|-----------------------|---------------------|-----------------------------|--------------|------------------|----------|----------------------------|--------|
| <input type="checkbox"/> | 7744         | ZXXXXX XXXXX XXXXXXXX | WAD40000096295      | Warfarin Sodium 5 mg Tablet | 1 tablet     | 22/08/2016       | Prepared | [ ]                        | [ ]    |
| <input type="checkbox"/> | htmh00047744 | ZXXXXX XXXXX XXXXXXXX | WAD40000096295      | Amiodarone 200 mg Tablet    | 1 tablet     | 22/08/2016       | Prepared | [ ]                        | [ ]    |
| <input type="checkbox"/> | htmh00047744 | ZXXXXX XXXXX XXXXXXXX | WAD40000096295      | Ranitidine 150 mg Tablet    | 2 tablet     | 22/08/2016       | Prepared | [ ]                        | [ ]    |

Figure 3.6-1 Release / Discard

#### STEP 1

Click on 'Release Discharge Batch' sub menu

#### STEP 2

Search patient record based on:

- a) **MRN**
- **Patient Name**
- c) **Drug Name**
- d) **Dispense Location**

#### STEP 3

Click on the  button to search the drug

#### STEP 4

Select check box to select patient drug for release batch

#### STEP 5

Select **Reason for Release / Discard**

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

#### STEP 6

Click on the  button to proceed release or discard process

### 3.7 Medication Return

Medication Return screen will allow user to return any drugs back into inventory

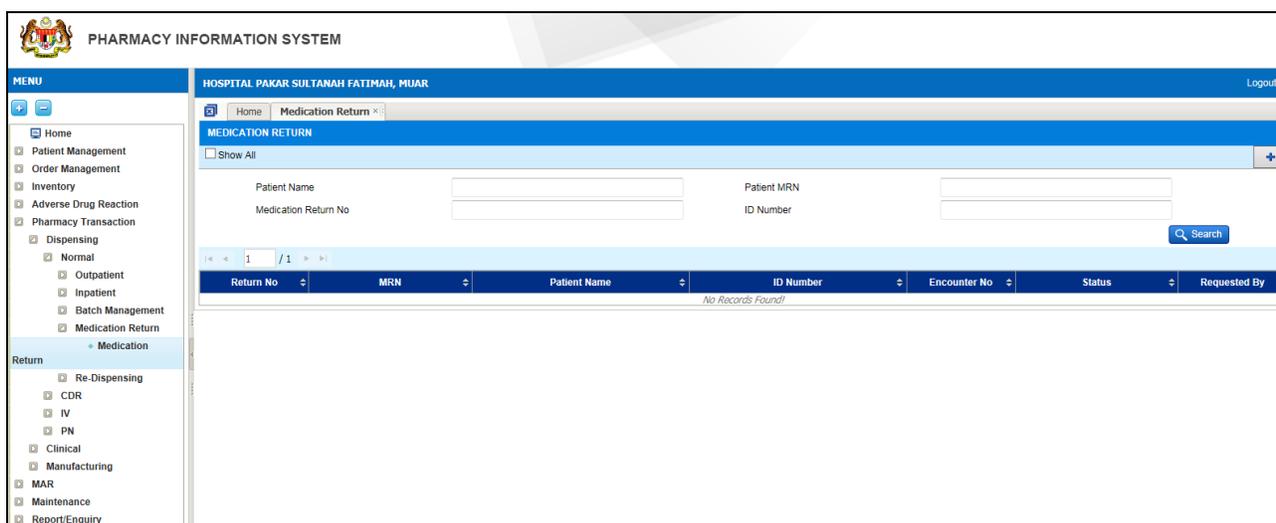


Figure 3.7-1 Medication Return Listing Page

#### STEP 1

Click on 'Medication Return' sub menu

#### STEP 2

Click on the  button to add new patient record

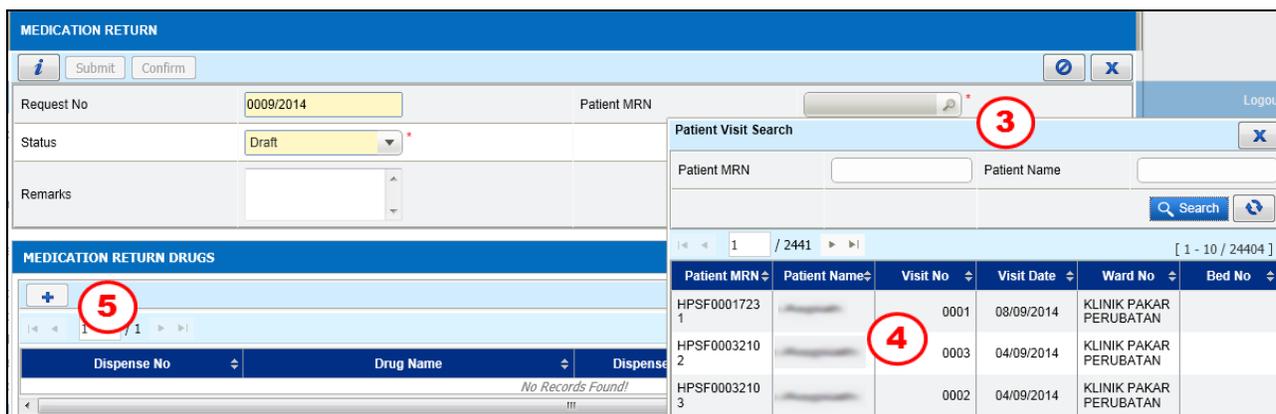


Figure 3.7-2 Medication Return

#### STEP 3

Click on the  button to search the patient

#### STEP 4

Double Click on the selected patient's name

#### STEP 5

Click on the  button to add drug to medication return list

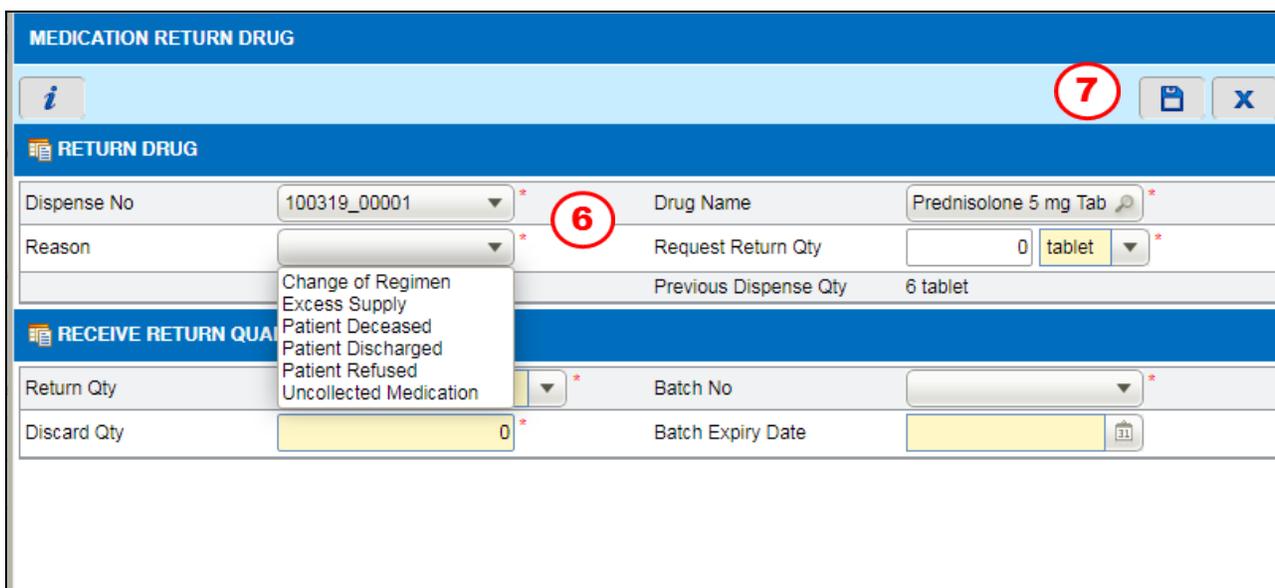


Figure 3.7-3 Medication Return

**STEP 6**

Select drug to be returned by criteria as below:

- a) **Dispense No**
- b) **Reason**
- c) **Drug Name**
- d) **Request Return Qty**

**Note**

Receive Return Quantity will be used to record:

- a) Return Qty
- b) Discard Qty
- c) Batch No

**STEP 7**

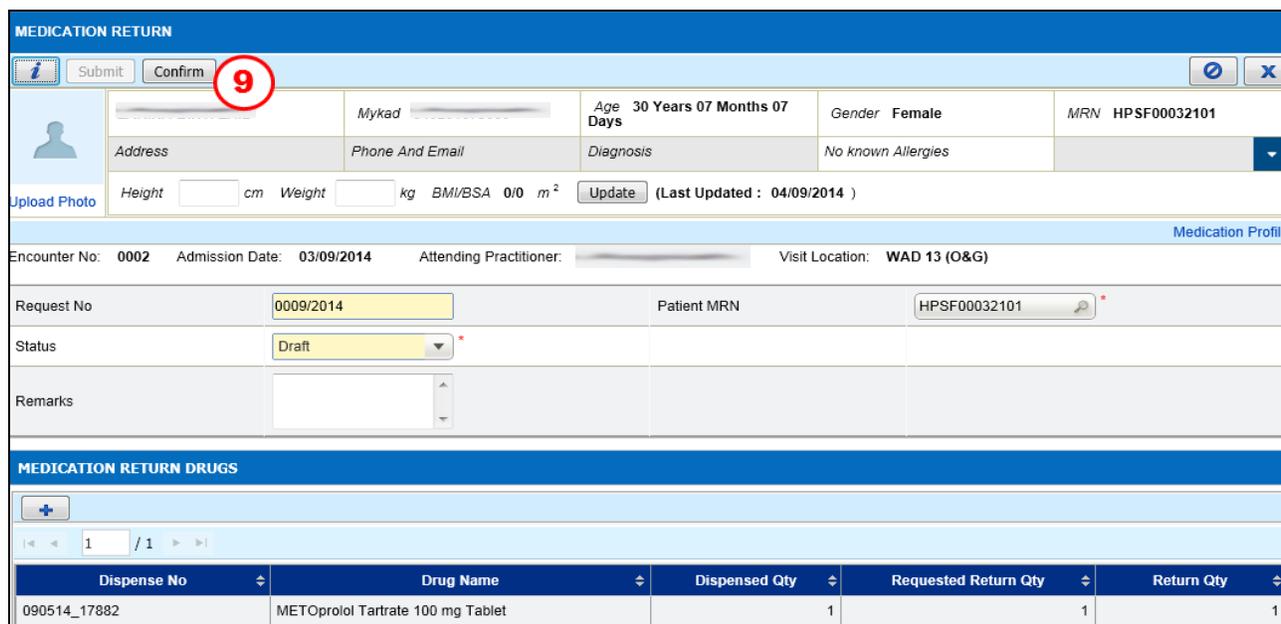
Click on the  button to save record



Figure 3.7-4 Confirmation Alert Message

**STEP 8**

Click on the  button to confirm save record



**MEDICATION RETURN**

Submit Confirm **9**

Mykad: \_\_\_\_\_ Age: 30 Years 07 Months 07 Days Gender: Female MRN: HPSF00032101

Address: \_\_\_\_\_ Phone And Email: \_\_\_\_\_ Diagnosis: \_\_\_\_\_ No known Allergies

Height: \_\_\_\_\_ cm Weight: \_\_\_\_\_ kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated : 04/09/2014 )

Encounter No: 0002 Admission Date: 03/09/2014 Attending Practitioner: \_\_\_\_\_ Visit Location: WAD 13 (O&G)

Request No: 0009/2014 Patient MRN: HPSF00032101

Status: Draft

Remarks: \_\_\_\_\_

**MEDICATION RETURN DRUGS**

| Dispense No  | Drug Name                         | Dispensed Qty | Requested Return Qty | Return Qty |
|--------------|-----------------------------------|---------------|----------------------|------------|
| 090514_17882 | METOpromol Tartrate 100 mg Tablet | 1             | 1                    | 1          |

Figure 3.7-5 Medication Return

**STEP 9**

Click on the **Confirm** button to confirm medication return process



**CONFIRMATION**

CONF0105: Are you sure you want to confirm?

Cancel Yes **10** No

Figure 3.7-6 Confirmation Alert Message



**INFORMATION**

INFO0607: Medication returned to stock successfully!

OK **11**

Figure 3.7-7 Information Alert Message

**STEP 10**

Click on the **Yes** button

**STEP 11**

Click on the **OK** button and screen will be automatically closed

### 3.8 Re-Dispensing

Re-Dispensing screen allows user to view medication detail by Dispense No and re-dispense medication to the patient.

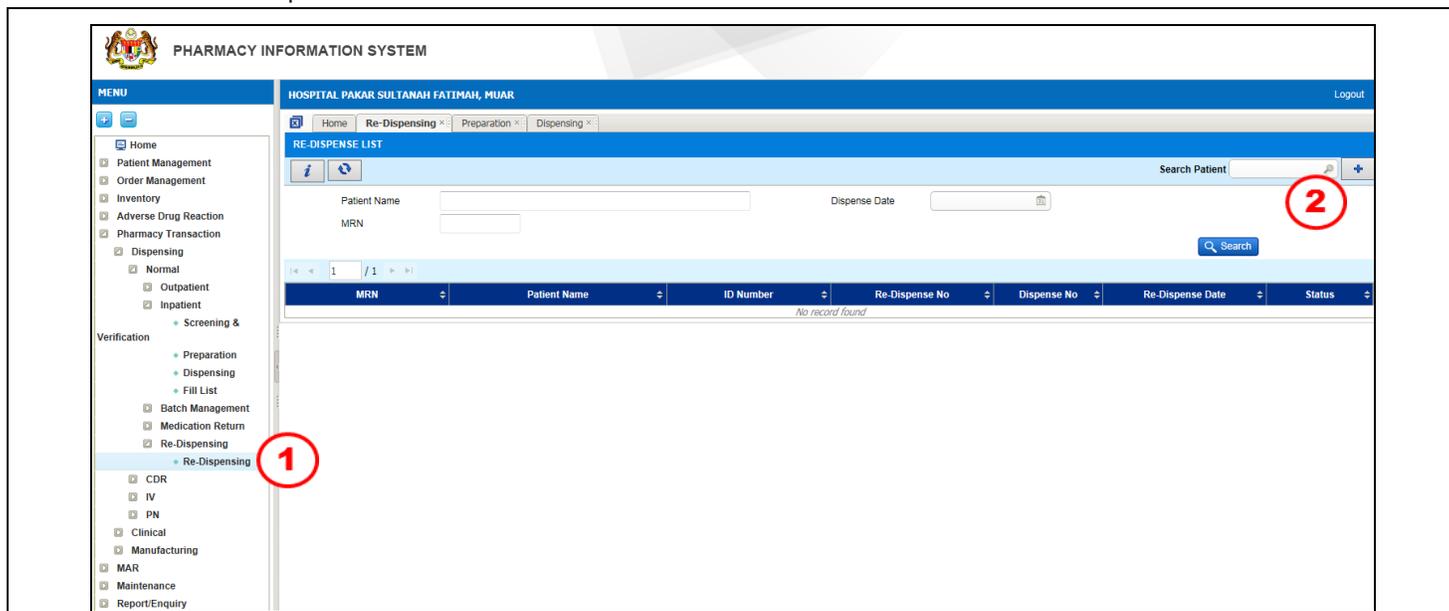


Figure 3.8-1 Re-Dispensing

#### STEP 1

Click on 'Re-Dispensing' sub menu

#### STEP 2

Click on the  button to search patient

#### Note

- Search MRN screen will be displayed as per Figure 3.8-2.
- On this screen, user will be able to search existing patient record by:
  - a) **Patient MRN**
  - b) **ID No**
  - c) **Patient Name**
- Allow to view the list of re-dispense at the listing page as per Figure 9.0-1.
- If need to re-dispense the drug again, click on the selected patient name and continue to proceed dispensing process.

| Patient Search   |                      |  |                           |
|--|----------------------|--|---------------------------|
| Patient MRN  | <input type="text"/> | Patient Name   | pawi <input type="text"/> |
| ID No  | <input type="text"/> | <input type="button" value="Search"/> <input type="button" value="Refresh"/> |                           |
| <input type="button" value="Previous"/> <input type="text" value="1"/> / 1 |                      | <input type="button" value="Next"/> [ 1 - 1 / 1 ]                            |                           |
| Patient MRN  | Patient Name         | ID No  |                           |
| htmh00047781   | <b>3</b>             | 980808088888   |                           |

Figure 3.8-2 Search Patient

**STEP 3**

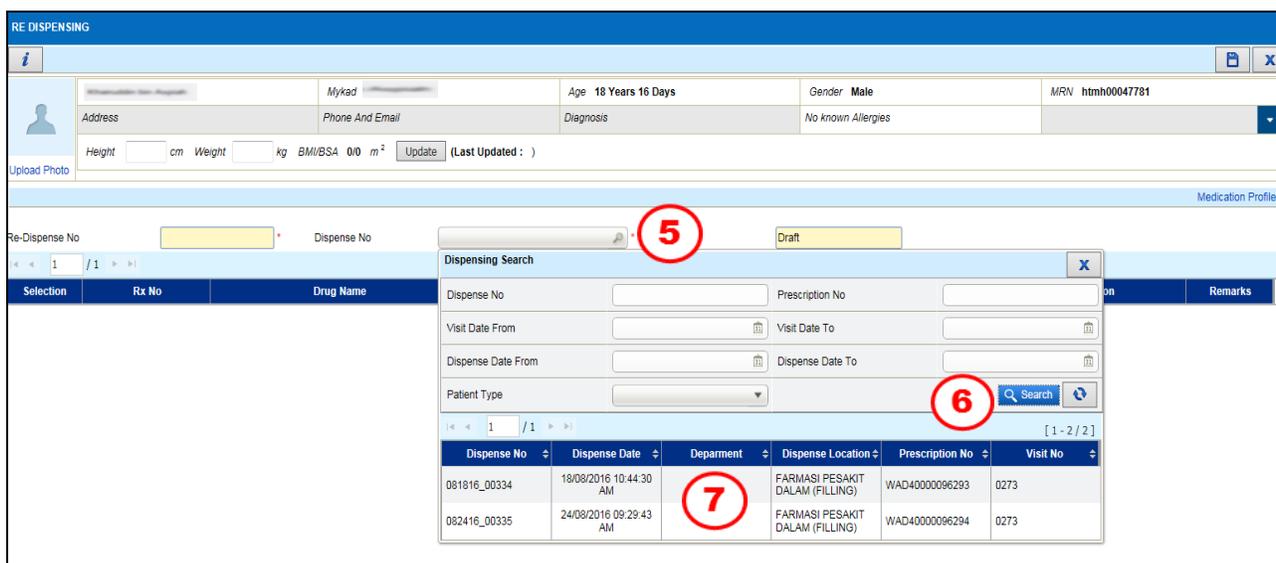
Click on the selected patient's name

| PHARMACY INFORMATION SYSTEM   |  |           |                |             |                  |             |                  |        |                 |  |  |  |  |  |  |
|---|--|-----------|----------------|-------------|------------------|-------------|------------------|--------|-----------------|--|--|--|--|--|--|
| <b>MENU</b><br><ul style="list-style-type: none"> <li>Home</li> <li>Patient Management</li> <li>Order Management</li> <li>Inventory</li> <li>Adverse Drug Reaction</li> <li>Pharmacy Transaction               <ul style="list-style-type: none"> <li>Dispensing                   <ul style="list-style-type: none"> <li>Normal</li> <li>Outpatient</li> <li>Inpatient</li> <li>Batch Management</li> <li>Medication Return</li> <li>Re-Dispensing</li> </ul> </li> <li>Re-Dispensing                   <ul style="list-style-type: none"> <li>CDR</li> <li>IV</li> <li>PN</li> </ul> </li> <li>Clinical</li> <li>Manufacturing</li> <li>MAR</li> <li>Maintenance</li> <li>Report/Enquiry</li> </ul> </li> </ul> | <b>HOSPITAL PAKAR SULTANAH FATIMAH, MUAR</b> <span style="float: right;">Logout</span><br>Home Re-Dispensing Preparation Dispensing<br><b>RE-DISPENSE LIST</b><br>Search Patient: htmh00047781 <input type="button" value="New Re-Disp"/> <b>4</b><br>Patient Name: <input type="text"/> Dispense Date: <input type="text"/><br>MRN: <input type="text"/><br><input type="button" value="Search"/><br>1 / 1<br><table border="1"> <thead> <tr> <th>MRN</th> <th>Patient Name</th> <th>ID Number</th> <th>Re-Dispense No</th> <th>Dispense No</th> <th>Re-Dispense Date</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: center;">No record found</td> </tr> </tbody> </table> | MRN       | Patient Name   | ID Number   | Re-Dispense No   | Dispense No | Re-Dispense Date | Status | No record found |  |  |  |  |  |  |
| MRN   | Patient Name   | ID Number | Re-Dispense No | Dispense No | Re-Dispense Date | Status      |                  |        |                 |  |  |  |  |  |  |
| No record found   |  |           |                |             |                  |             |                  |        |                 |  |  |  |  |  |  |

Figure 3.8-3 Re- Dispensing

**STEP 4**

Click on the  button to add new re-dispensing record as Figure 3.7-3



**RE DISPENSING**

Mykad: [Redacted] Age: 18 Years 16 Days Gender: Male MRN: htmh00047781

Address: [Redacted] Phone And Email: [Redacted] Diagnosis: [Redacted] No known Allergies

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

Re-Dispense No: [Redacted] Dispense No: [Redacted] Draft

**Dispensing Search**

Dispense No: [Redacted] Prescription No: [Redacted]

Visit Date From: [Redacted] Visit Date To: [Redacted]

Dispense Date From: [Redacted] Dispense Date To: [Redacted]

Patient Type: [Redacted] Search [Redacted]

| Dispense No  | Dispense Date          | Department | Dispense Location               | Prescription No | Visit No |
|--------------|------------------------|------------|---------------------------------|-----------------|----------|
| 081816_00334 | 18/08/2016 10:44:30 AM | [Redacted] | FARMASI PESAKIT DALAM (FILLING) | WAD40000096293  | 0273     |
| 082416_00335 | 24/08/2016 09:29:43 AM | [Redacted] | FARMASI PESAKIT DALAM (FILLING) | WAD40000096294  | 0273     |

Figure 3.8-4 Re-Dispensing

**STEP 5**

Click on the **Dispense No**  button to search dispense record

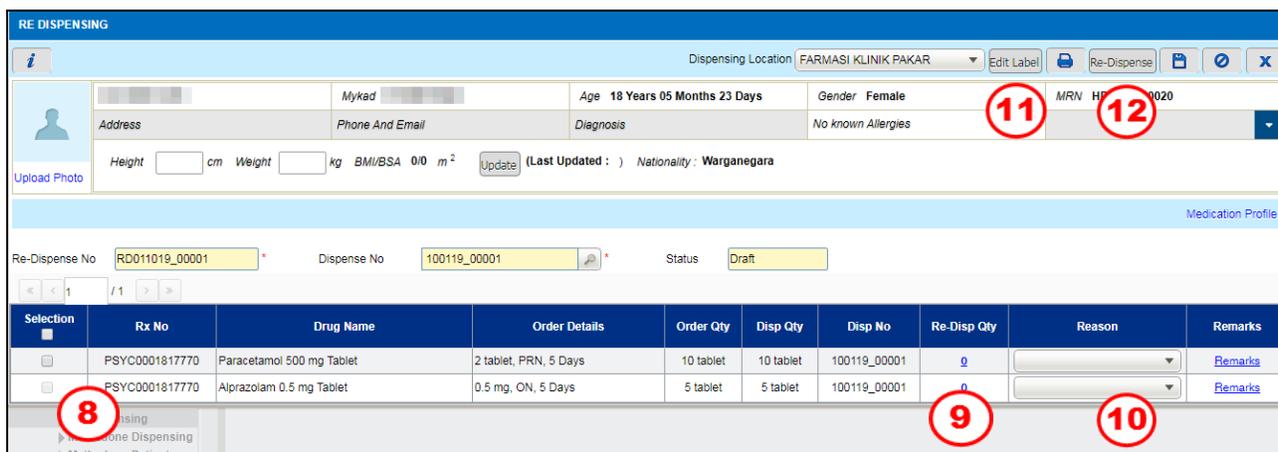
**STEP 6**

Select drug to be re-dispense by criteria as below:

- Dispense No**
- Visit Date From**
- Dispense Date From**
- Patient Type**
- Prescription No**
- Visit Date To**
- Visit Date To**
- Dispense Date To**

**STEP 7**

Double click on the selected **Dispense No**



**RE DISPENSING**

Dispensing Location: FARMASI KLINIK PAKAR [Edit Label] [Re-Dispense]

Mykad: [Redacted] Age: 18 Years 05 Months 23 Days Gender: Female (11) MRN: H000000020 (12)

Address: [Redacted] Phone And Email: [Redacted] Diagnosis: [Redacted] No known Allergies

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

Re-Dispense No: RD011019\_00001 \* Dispense No: 100119\_00001 \* Status: Draft

| Selection                | Rx No          | Drug Name                 | Order Details         | Order Qty | Disp Qty  | Disp No      | Re-Disp Qty | Reason     | Remarks                 |
|--------------------------|----------------|---------------------------|-----------------------|-----------|-----------|--------------|-------------|------------|-------------------------|
| <input type="checkbox"/> | PSYC0001817770 | Paracetamol 500 mg Tablet | 2 tablet, PRN, 5 Days | 10 tablet | 10 tablet | 100119_00001 | 0           | [Dropdown] | <a href="#">Remarks</a> |
| <input type="checkbox"/> | PSYC0001817770 | Alprazolam 0.5 mg Tablet  | 0.5 mg, ON, 5 Days    | 5 tablet  | 5 tablet  | 100119_00001 | 0           | [Dropdown] | <a href="#">Remarks</a> |

Figure 3.8-5 Re- Dispensing

**STEP 8**

Click at the Selection  checkbox for selected drug

**STEP 9**

Enter the *Re-Disp Qty*

**STEP 10**

Enter the *Reason*

**Note**

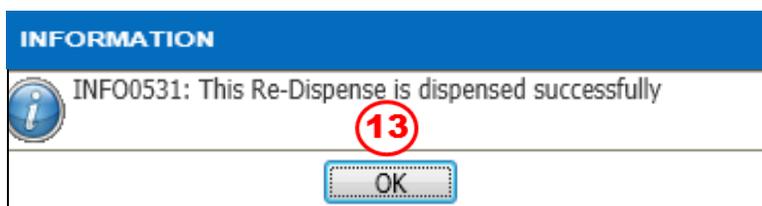
- Reason consist of :
  - Spilled
  - Broken
  - Lost
  - Others
- Reason is mandatory to be entered in order to perform Re-Dispensing function

**STEP 11**

Click on the **Edit Label** if necessary (to reprint the drug label)

**STEP 12**

Click on the **Re-Dispense** button



**Figure 3.8-6 Confirmation Alert Message**

**STEP 13**

Click on the  button

### 3.9 FPP Medication Summary

Function is to view Full Paying Patients details and update FPP supply for patient. User able to print Invoice for the finalized FPP Medication summary.

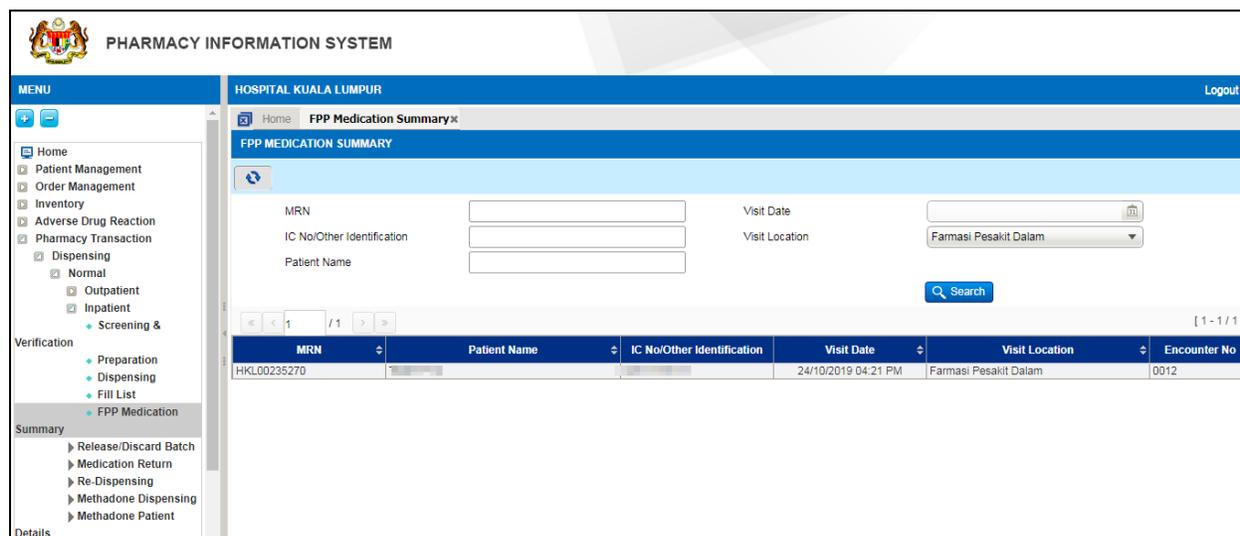


Figure 3.9-1 FPP Listing Page

#### STEP 1

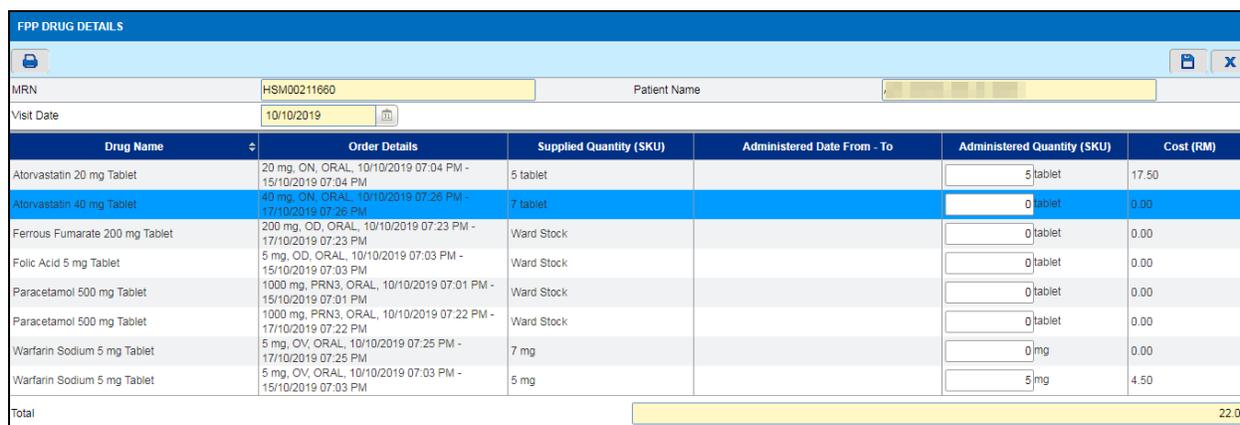
Click on 'FPP Medication Summary' sub menu

#### STEP 2

Click on the  button to search patient

#### STEP 3

Select the patient to view FPP Medication Summary as shown in Figure 3.9-2



| Drug Name                      | Order Details  | Supplied Quantity (SKU) | Administered Date From - To | Administered Quantity (SKU) | Cost (RM) |
|--------------------------------|--|-------------------------|-----------------------------|-----------------------------|-----------|
| Atorvastatin 20 mg Tablet      | 20 mg, ON, ORAL, 10/10/2019 07:04 PM - 15/10/2019 07:04 PM     | 5 tablet                |                             | 5 tablet                    | 17.50     |
| Atorvastatin 40 mg Tablet      | 40 mg, ON, ORAL, 10/10/2019 07:26 PM - 17/10/2019 07:26 PM     | 7 tablet                |                             | 0 tablet                    | 0.00      |
| Ferrous Fumarate 200 mg Tablet | 200 mg, OD, ORAL, 10/10/2019 07:23 PM - 17/10/2019 07:23 PM    | Ward Stock              |                             | 0 tablet                    | 0.00      |
| Folic Acid 5 mg Tablet         | 5 mg, OD, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM      | Ward Stock              |                             | 0 tablet                    | 0.00      |
| Paracetamol 500 mg Tablet      | 1000 mg, PRN3, ORAL, 10/10/2019 07:01 PM - 15/10/2019 07:01 PM | Ward Stock              |                             | 0 tablet                    | 0.00      |
| Paracetamol 500 mg Tablet      | 1000 mg, PRN3, ORAL, 10/10/2019 07:22 PM - 17/10/2019 07:22 PM | Ward Stock              |                             | 0 tablet                    | 0.00      |
| Warfarin Sodium 5 mg Tablet    | 5 mg, OV, ORAL, 10/10/2019 07:25 PM - 17/10/2019 07:25 PM      | 7 mg                    |                             | 0 mg                        | 0.00      |
| Warfarin Sodium 5 mg Tablet    | 5 mg, OV, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM      | 5 mg                    |                             | 5 mg                        | 4.50      |
| Total                          |  |                         |                             |                             | 22.00     |

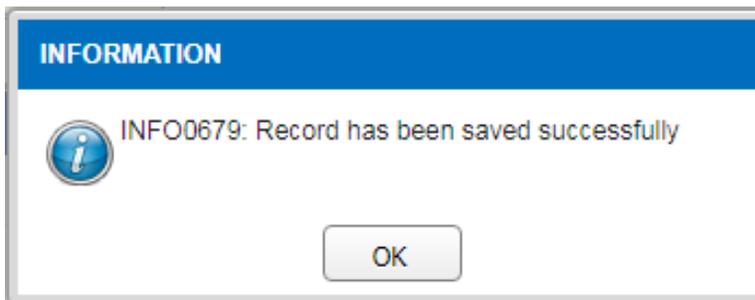
Figure 3.9-2 FPP Drug Details

**STEP 4**

Edit Administered Quantity based on supplied quantity

**STEP 5**

Click  button to save record and pop up will display as per figure 3.9.3



**Figure 3.9-3 Information**

**STEP 6**

Click  button to save record and Total price will display as per figure 3.9.4

| FPP DRUG DETAILS               |  |                         |                             |                             |              |
|--------------------------------|--|-------------------------|-----------------------------|-----------------------------|--------------|
| MRN                            | HSM00211660  | Patient Name            |                             |                             |              |
| Visit Date                     | 10/10/2019   |                         |                             |                             |              |
| Drug Name                      | Order Details  | Supplied Quantity (SKU) | Administered Date From - To | Administered Quantity (SKU) | Cost (RM)    |
| Atorvastatin 20 mg Tablet      | 20 mg, ON, ORAL, 10/10/2019 07:04 PM - 15/10/2019 07:04 PM     | 5 tablet                |                             | 5 tablet                    | 17.50        |
| Atorvastatin 40 mg Tablet      | 40 mg, ON, ORAL, 10/10/2019 07:26 PM - 17/10/2019 07:26 PM     | 7 tablet                |                             | 5 tablet                    | 35.00        |
| Ferrous Fumarate 200 mg Tablet | 200 mg, OD, ORAL, 10/10/2019 07:23 PM - 17/10/2019 07:23 PM    | Ward Stock              |                             | 0 tablet                    | 0.00         |
| Folic Acid 5 mg Tablet         | 5 mg, OD, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM      | Ward Stock              |                             | 0 tablet                    | 0.00         |
| Paracetamol 500 mg Tablet      | 1000 mg, PRN3, ORAL, 10/10/2019 07:01 PM - 15/10/2019 07:01 PM | Ward Stock              |                             | 0 tablet                    | 0.00         |
| Paracetamol 500 mg Tablet      | 1000 mg, PRN3, ORAL, 10/10/2019 07:22 PM - 17/10/2019 07:22 PM | Ward Stock              |                             | 0 tablet                    | 0.00         |
| Warfarin Sodium 5 mg Tablet    | 5 mg, OV, ORAL, 10/10/2019 07:25 PM - 17/10/2019 07:25 PM      | 7 mg                    |                             | 0 mg                        | 0.00         |
| Warfarin Sodium 5 mg Tablet    | 5 mg, OV, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM      | 5 mg                    |                             | 5 mg                        | 4.50         |
| <b>Total</b>                   |  |                         |                             |                             | <b>57.00</b> |

**Figure 3.9-4 FPP Drug Details**

**STEP 6**

Click  button to print FPP invoice

(FULL PAYING PATIENT)

**KEMENTERIAN KESIHATAN MALAYSIA**  
**Hospital Seri Manjung**

**Invoice**

Patient Name : ██████████ Date : 24/10/2019 04:54 PM

Age : 73 Years 04 Months Patient ID : ██████████

Gender : Lelaki MRN : HSM00211660

Room No/Bed No : \_\_\_\_/\_\_\_\_ Location : WAD 3

| No         | Drug Name                      | Cost | Quantity | Amount |
|------------|--------------------------------|------|----------|--------|
| 1          | Atorvastatin 20 mg Tablet      | 3.50 | 5        | 17.50  |
| 2          | Atorvastatin 40 mg Tablet      | 7.00 | 5        | 35.00  |
| 3          | Ferrous Fumarate 200 mg Tablet | 0.10 | 0        | 0.00   |
| 4          | Folic Acid 5 mg Tablet         | 0.10 | 0        | 0.00   |
| 5          | Paracetamol 500 mg Tablet      | 0.10 | 0        | 0.00   |
| 6          | Paracetamol 500 mg Tablet      | 0.10 | 0        | 0.00   |
| 7          | Warfarin Sodium 5 mg Tablet    | 0.90 | 0        | 0.00   |
| 8          | Warfarin Sodium 5 mg Tablet    | 0.90 | 0        | 0.00   |
| Total : RM |                                |      |          | 57.00  |

**Figure 3.9-5 FPP Invoice**

### 3.10 Single Stage Dispensing

This function allow user to record and dispense medication in faster way. Normally it will be use if all the process was handle by one user. User able to allocate quantity of drug by batch, generate and print drug label, extemporaneous worksheet, ingredient label and record next medication collection detail.

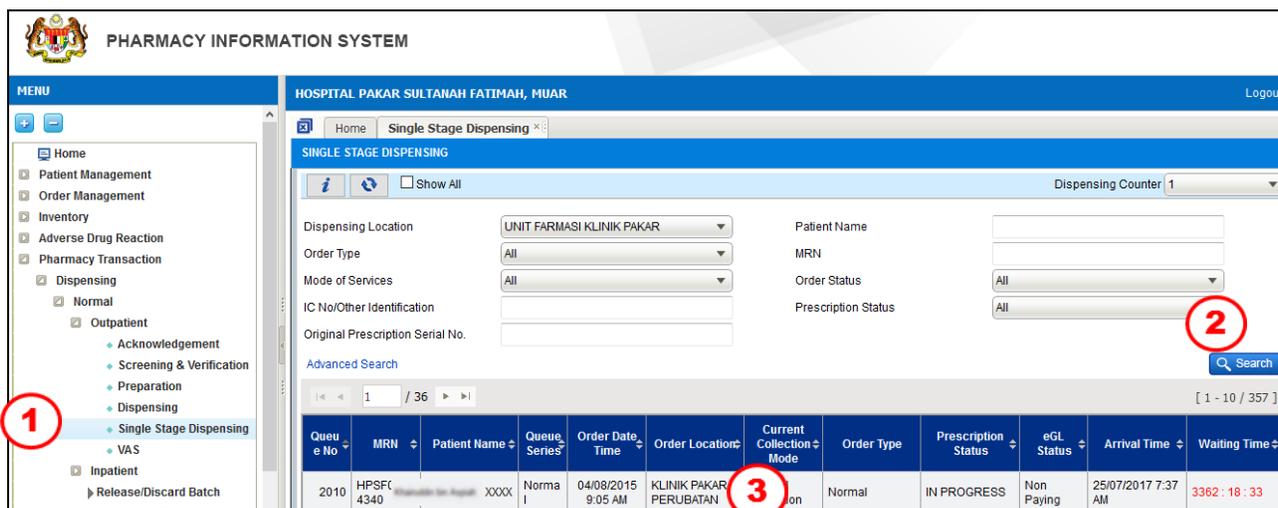


Figure 3.10-1 Single Stage Dispensing Landing Screen

#### STEP 1

Click on ‘Single Stage Dispensing’ sub menu

#### Note

- To perform Single Stage Dispensing, patient prescription must go through Acknowledgement process. Refer [Section 3.0 Acknowledgement](#) for acknowledgement steps
- Various search criteria are provided as below:

| Basic Search |                     |  |   |
|--------------|---------------------|--|---|
| No           | Field               | Description  | Remark  |
| a            | Show All            |  | Able to view all patient record                                   |
| b            | Dispensing Location | Dispensing location. (It will list down all active location) | Able to filter and search patient’s record by dispensing location |
| c            | Patient Name        | Name of patient  | Able to filter and search by patient’s name                       |



|   |                            |  |   |
|---|----------------------------|--|---|
| d | Order Type                 | -All<br>-Normal<br>-SPUB<br>-Discharge   | Able to filter and search patient's record by order type  |
| e | MRN                        | Patient Medical Record Number  | Search option:<br><ul style="list-style-type: none"><li>Type the MRN either full or partial:<br/><i>Example: HPSF00001234 or "1234"</i></li></ul>   |
| f | Mode of Services           | All<br>-Appointment<br>Card<br>-Email and Take<br>-Fax and Take<br>-Normal Collection<br>-SMS and Take<br>-Telephone and Take<br>-UMP<br>-Others | Able to filter and search patient's record by mode of services  |
| g | Order Status               | -All<br>-Normal<br>-SPUB<br>-Discharge<br>-Referred Patient  | All -Type of search from range Normal, SPUB, Discharge and Referred Patient<br><br>Normal – Prescription from normal order<br><br>SPUB - Prescription from SPUB order<br><br>Discharge - Prescription from Discharge order<br><br>Referred Patient – Prescription from referred patient |
| h | IC No/Other Identification | Identification Number  | Allow to search by full or partial ID Number  |
| i | Prescription Status        | -All<br>-Hold<br>-Expired  | Able to filter by prescription status   |
| j | Original Prescription      | Original Prescription  | Able to search by Original Prescription   |

|                        | Serial No           | Serial Number   | Serial Number   |
|------------------------|---------------------|---|---|
| <b>Advanced Search</b> |                     |   |   |
| a                      | Order Location      | Order location. (It will list down all active location)           | Able to filter and search patient's record by order location      |
| b                      | Order Location Type | -All<br>-Clinic<br>-Day Care<br>-ER<br>-Nursing Unit<br>-Pharmacy | Able to filter and search patient's record by order location type |
| c                      | Order Date from     | Order Date from   | Able to filter and search patient's record by order date from     |
| d                      | Order Date To       | Order Date To   | Able to filter and search patient's record by order date to       |
| e                      | Queue Date          | Queue Date  | Able to filter and search patient's record by queue date          |
| f                      | Queue Series        | -All<br>-Normal<br>-Express<br>-Special<br>-Others                | Able to filter and search p patient's record by queue series      |
| g                      | Queue No            | Queue No  | Able to filter and search patient's record by queue no            |
| h                      | Recorded by         |   | Search patient by recorded by name                                |

**Table 3.10-1**

## STEP 2

Click on the  button to search the patient

### **Note**

*Search result of current order patient list will be displayed:*

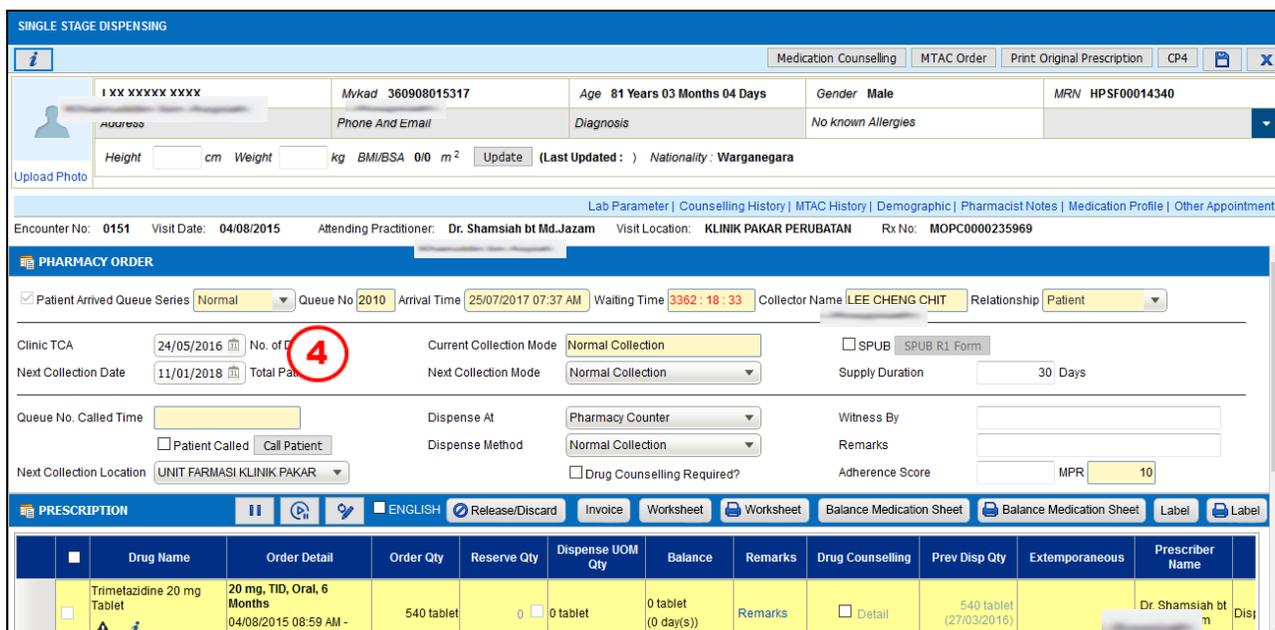
- Queue No
- MRN
- Patient Name
- Queue Series
- Order Date Time
- Order Location
- Current Collection Mode
- Order Type
- Prescription Status
- eGL Status
- Arrival Time
- Waiting Time

### STEP 3

Double click on the selected patient and patient information will be shown as per Figure 3.10-2

### STEP 4

Enter the clinic TCA and next collection date if applicable



**SINGLE STAGE DISPENSING**

Medication Counselling | MTAC Order | Print Original Prescription | CP4

IXX XXXXX XXXX | Mvkad 360908015317 | Age 81 Years 03 Months 04 Days | Gender Male | MRN HPSF00014340

Address | Phone And Email | Diagnosis | No known Allergies

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

Lab Parameter | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment

Encounter No: 0151 | Visit Date: 04/08/2015 | Attending Practitioner: Dr. Shamsiah bt Md.Jazam | Visit Location: KLINIK PAKAR PERUBATAN | Rx No: MOPC0000235969

**PHARMACY ORDER**

Patient Arrived Queue Series: Normal | Queue No: 2010 | Arrival Time: 25/07/2017 07:37 AM | Waiting Time: 3362 : 18 : 33 | Collector Name: LEE CHENG CHIT | Relationship: Patient

Clinic TCA: 24/05/2016 | No. of D: **4** | Current Collection Mode: Normal Collection |  SPUB |  SPUB R1 Form

Next Collection Date: 11/01/2018 | Total Pa: | Next Collection Mode: Normal Collection | Supply Duration: 30 Days

Queue No. Called Time: | Dispense At: Pharmacy Counter | Witness By: |

Patient Called | Call Patient | Dispense Method: Normal Collection | Remarks: |

Next Collection Location: UNIT FARMASI KLINIK PAKAR |  Drug Counselling Required? | Adherence Score: | MPR: 10

**PRESCRIPTION** | ENGLISH | Release/Discard | Invoice | Worksheet | Worksheet | Balance Medication Sheet | Balance Medication Sheet | Label | Label

|  | Drug Name                  | Order Detail  | Order Qty  | Reserve Qty | Dispense UOM Qty | Balance             | Remarks | Drug Counselling                | Prev Disp Qty           | Extemporaneous | Prescriber Name   |
|--|----------------------------|---|------------|-------------|------------------|---------------------|---------|---------------------------------|-------------------------|----------------|-------------------|
|  | Trimetazidine 20 mg Tablet | 20 mg, TID, Oral, 6 Months<br>04/08/2015 08:59 AM - 24/08/2015 08:59 AM | 540 tablet | 0           | 0 tablet         | 0 tablet (0 day(s)) | Remarks | <input type="checkbox"/> Detail | 540 tablet (27/03/2016) |                | Dr. Shamsiah bt m |

Figure 3.10-2 Single Stage Dispensing

### Note

- **Alternate Drug**  
User to select different drug with the same active ingredient and same administration route.
- **Hold and Resume**  
Hold' function in dispensing is different from hold function in screening and preparation. This hold function is to record error before dispensing
- **Intervention**  
This function allows user to modify drugs details frequency, duration and dose only.
- **Edit Label**  
User able to edit and print drug label
- **Next Medication Collection record**  
User able to record Date and Collection Location for partial medication.
- **TCA**  
User able to record Date of next appointment to visit doctor / prescriber.

• **SPUB R1 Form**

**SPUB R1 Form** button will allow pharmacist to send SPUB request to referred facility. (Only for partial supply drug). Pharmacist will fill in SPUB information in SPUB R1 Form and has option to print SPUB R1 form.

The screenshot shows the 'SINGLE STAGE DISPENSING' interface. At the top, there are navigation buttons: Medication Counselling, MTAC Order, Print Original Prescription, CP4, and a close button. Below this is a patient information section with fields for Mykad, Age (81 Years 03 Months 04 Days), Gender (Male), and MRN (HPSF00014340). There are also fields for Address, Phone And Email, Diagnosis, and No known Allergies. A 'SPUB R1 Form' button is visible in the Pharmacy Order section. Below the Pharmacy Order section is a Prescription table with columns: Drug Name, Order Detail, Order Qty, Reserve Qty, Dispense UOM Qty, Balance, Remarks, Drug Counselling, Prev Disp Qty, Extemporaneous, and Prescriber Name. The table contains one entry for Trimetazidine 20 mg Tablet.

| Drug Name                  | Order Detail  | Order Qty  | Reserve Qty | Dispense UOM Qty | Balance                | Remarks | Drug Counselling                | Prev Disp Qty              | Extemporaneous | Prescriber Name |
|----------------------------|---|------------|-------------|------------------|------------------------|---------|---------------------------------|----------------------------|----------------|-----------------|
| Trimetazidine 20 mg Tablet | 20 mg, TID, Oral, 6 Months<br>04/08/2015 08:59 AM - | 540 tablet | 0           | 0 tablet         | 0 tablet<br>(0 day(s)) | Remarks | <input type="checkbox"/> Detail | 540 tablet<br>(27/03/2016) |                |                 |

Figure 3.10-3 Single Stage Dispensing

**Note**

Details process for each process of Intervention, Alternate Drug and Hold are as followed:

- Intervention : Refer to [Section 3.2.2 Intervention](#).
- Alternate Drug : Refer to [Section 3.2.3 Alternate](#).
- Hold : Refer to [Section 3.2.5 Hold](#).

**STEP 5**

Click on the icon to do any of these functions such as Intervention, Alternate/Combination Drug and Hold.

**Note**

Reserve Quantity will calculate automatically once button is click. However, user can manually change the quantity by clicking on the hyperlink number in Reserve Qty column.

**SINGLE STAGE DISPENSING**

Medication Counselling | MTAC Order | Print Original Prescription | CP4

Mykad: 360908015317 | Age: 81 Years 03 Months 04 Days | Gender: Male | MRN: HPSF00014340

Address: [Redacted] | Phone: [Redacted] | Diagnosis: [Redacted] | No known Allergies

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

Encounter No: 0151 | Visit Date: 04/08/2015 | Attending Practitioner: Dr. Shamsiah bt Md.Jazam | Visit Location: KLINIK PAKAR PERUBATAN | Rx No: MOPC000235969

**PHARMACY ORDER**

Patient Arrived Queue Series: Normal | Queue No: 2010 | Arrival Time: 25/07/2017 07:37 AM | Waiting Time: 3362:18:33 | Collector Name: LEE CHENG CHIT | Relationship: Patient

Clinic TCA: 24/05/2016 | No. of Days: 0 | Current Collection Mode: Normal Collection |  SPUB | SPUB R1 Form

Next Collection Date: 11/01/2018 | Total Patient: 4 | Next Collection Mode: Normal Collection | Supply Duration: 30 Days

Queue No. Called Time: [Redacted] | Dispense At: Pharmacy Counter | Witness By: [Redacted]

Patient Called | Call Patient (7) | Dispense Method: Normal Collection | Remarks: [Redacted]

Next Collection Location: UNIT FARMASI KLINIK PAKAR |  Drug Counselling Required? | Adherence Score: [Redacted] | MPR: 10 (6)

**PRESCRIPTION** | ENGLISH | Release/Discard | Invoice | Worksheet | Balance Medication Sheet | Label

| Drug Name                  | Order Detail  | Order Qty  | Reserve Qty | Dispense UOM Qty | Balance             | Remarks | Drug Counselling                | Prev Disp Qty           | Extemporaneous | Preparation |
|----------------------------|---|------------|-------------|------------------|---------------------|---------|---------------------------------|-------------------------|----------------|-------------|
| Trimetazidine 20 mg Tablet | 20 mg, TID, Oral, 6 Months<br>04/08/2015 08:59 AM - 24/08/2015 08:59 AM | 540 tablet | 0 tablet    | 0 tablet         | 0 tablet (0 day(s)) | Remarks | <input type="checkbox"/> Detail | 540 tablet (27/03/2016) |                | sh bt n Dis |

Figure 3.10-4 Single Stage Dispensing

**STEP 6**

Click on the or button to print

**Note**

Refer to [Section 3.3.3 for Drug Label printing detail process.](#)

**STEP 7**

Click at the button to stop the waiting time

**STEP 8**

Click on the button to dispense the drug

**CONFIRMATION**

CONF0064: Do you want to dispense now?

(9)

Figure 3.10-5 Confirmation Alert Message

**STEP 9**

Click on the button to confirm

## 4.0 Acronyms

| Abbreviation | Definition                       |
|--------------|----------------------------------|
| PhIS         | Pharmacy Information System      |
| CPS          | Clinical Pharmacy System         |
| PM           | Patient Management               |
| eGL          | Electronic Guarantee Letter      |
| HRMIS        | Human Resource Management System |
| MRN          | Medical Record Number            |
| MOH          | Ministry Of Health               |

## 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>Radiopharmaceuticals</i> | <a href="#">Click Here</a> |
| 7  | <i>Galenical</i>              | <a href="#">Click Here</a> | 18 | <i>Outpatient</i>           | <a href="#">Click Here</a> |
| 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 |                             |                            |