



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

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## **User Manual Integrated Web Portal (IWP) Maintenance - Pharmacy**

<b>Version</b>	<b>: 11<sup>th</sup> Edition</b>
<b>Document ID</b>	<b>: HQ_U.MANUAL_IWP_MAINTENANCE_PHAR</b>



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*Reference ID : HQ\_U.MANUAL\_IWP\_MAINTENANCE\_PHAR\_11<sup>th</sup> E*

*Application reference: PhIS & CPS v2.3*



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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 that geared toward pharmacy excellence. This implementation would transform most of the current manual process to electronic system would benefit facility end user in the health care sector.

There are 12 modules to assist service 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 Card (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 IWP (Maintenance Pharmacy) sub-module and its key features and functionalities. The primary objective is to guide users through the process of completing PhIS application process.

User will understand the following activities in details:

- Create a new maintenance Pharmacy
- Edit a Maintenance Pharmacy

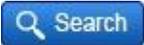
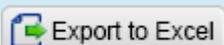
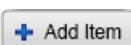
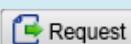
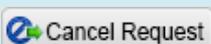
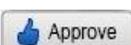
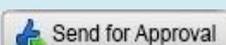
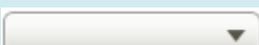
### 1.3 Organised Sections

These are the sections within this document:

- Section 1: Introduction
- Section 2: Application Standard Features
- Section 3: Maintenance Pharmacy
- Section 4: Acronyms
- Section 5 : Link to IWP Modules

## 2.0 Application Standard Features

### 2.1 PhIS Legend

Standard Legend			
	Login to PhIS		Logout from PhIS
	Change Login Password		Reset Login Screen
	Expand Menu		Collapse Menu
	Display Home Tab		Expand Module
	Collapse Module		Close All Open Tabs
	Refresh Screen		Search Record
	Add/Create New Record		Show Help
	Print	*	Mandatory Field
	Calendar Icon		Search Icon
	Close Window		Radio Button
<input type="checkbox"/>	Checkbox		Edit Record
	Cancel		Delete Record
	Save		Export and Open Report in Excel Format
	Add Item to the list		Delete Item from the list
	Request for Approval		Cancel the Request
	Approve Transaction		Reject Transaction
	Send for Approval		Dropdown Box
	Automatically Display/Retrieve Box		Empty Text Box

#### Note

- To learn more about Login Information, kindly click [Login Information](#) Modules for descriptive step.

### 3.0 Maintenance - Pharmacy

#### Overview

Application maintenance describes the relationship, details of the data flow for each function, the details validation and data/information that required being setup for system purpose. The module will provide a portal for configuration guide for the user which describe the basic and advance featured available on the system. This featured allow user to view and modify existing record and also create new record for each module. This application enables the facility to perform any modification to existing setting.

#### User Group

This module is intended for BPF users (subject to user assigned by the BPF)

#### Functional Diagram

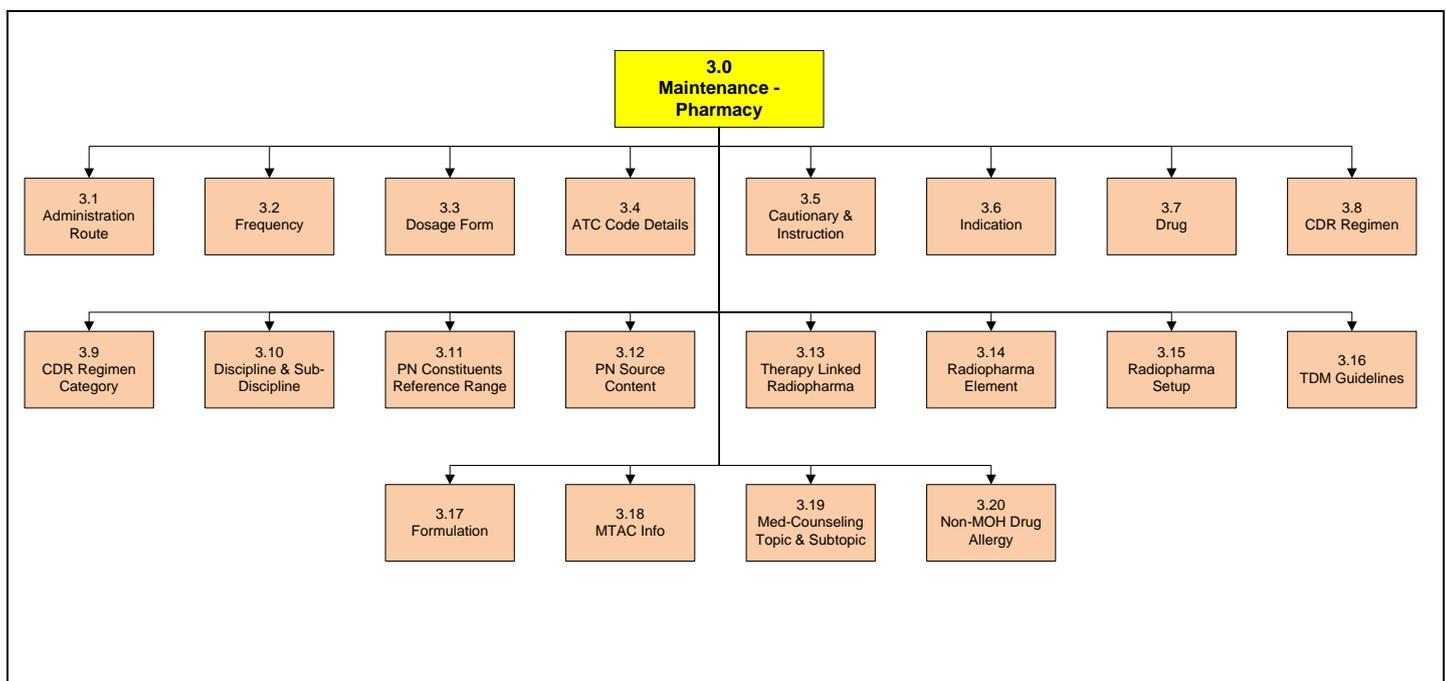


Figure 3.0

#### Maintenance Pharmacy Setup module (HQ) comprised of:

- Administration Route**  
 Allows user to create or modify administration route records. The administration Route records will be used by Drug Master, Order Management, Inpatient Pharmacy and Outpatient Pharmacy in PhIS system.
- Frequency master**  
 Frequency is number of times that drug occurs within a given period or per day. The number of drug order and dispense is an interval of a frequency distribution. Facility user is able to view existing record for frequency master details done by HQ in system.
- Dosage Form**  
 Allows user to create or modify dosage form records. The dosage form records will be used for Inventory, Drug Master, Order Management, Inpatient Pharmacy and Outpatient Pharmacy in PhIS system.
- Active Ingredient**  
 Active ingredients are components in a drug that provide some pharmaceutical value, in contrast with the inactive ingredients, which act as carriers to make the drug easier for the body to process.



- **ACT Code details**  
The Anatomical Therapeutic Chemical (ATC) Classification System is used for the classification of drugs. This pharmaceutical coding system divides drugs into different groups according to the organ or system on which they act on their therapeutic and chemical characteristics. One drug can have more than one code: several different brands share the same code if they have the same active substance and indications. Facility user is able to view existing record for ATC code details done by HQ in system
- **Cautionary & Instruction**  
Cautionary are intended to warn or advice to beware about drug, or when taking drug. Instruction intended to advice about drug or way to take drug
- **Indication**  
An indication is a valid reason to use a certain test, medication, procedure, or surgery. Indicated as necessary or expedient, as in the administration of a drug. System will suggest the proper treatment of a disease as that demanded by its cause or symptoms.
- **Drug**  
Drug is natural or synthetic substance which taken into a living body affects its functioning or structure, and is used in the diagnosis, mitigation, treatment, or prevention of a disease or relief of discomfort. Drug screen allows user facility user to view and to modify drug master records. The Drug records will be used for Inpatient Pharmacy, Outpatient Pharmacy, Medication Order and Manufacturing modules in system.
- **CDR Regimen Master**  
Cytotoxic Drug Reconstitution (CDR) an anticancer drug which acts by killing or preventing the cell division. Any program (including drugs) that regulates aspects of one's lifestyle for a hygienic or therapeutic purpose; a program of treatment. System able to view apply treatment plan that specifies the dosage, the schedule, and the duration of Treatment, regimen code, regimen Status, regimen description, category, sub-category, cycle duration, no of cycles and remarks of the regimen if any while creating a new regimen. CDR Regimen Master setup by HQ.
- **CDR Regimen Category**  
Cytotoxic Drug Reconstitution (CDR) regimen is a plan a regulated medical treatment designed to give a positive result. CDR regimen categories are Hematology, Oncology, Pediatric and others. Category is important, in order to prepare the regimen for CDR treatment. Facility user able to view category and regimen type in system.
- **Prescriber**  
Is a person give directions, either orally or in writing, for the preparation and administration of a remedy to be used in the treatment of any disease System will create new register number for prescriber using system. Record prescriber details in system. Facility user able to edit and save record.
- **Discipline & Sub-Discipline Master**  
Discipline and sub-discipline are facility department responsible for the administration of functions and activities pertaining to the delivery of medication treatment. System will be setup by HQ according to based on facility setup.
- **PN Constituents Reference Range**  
Parenteral Nutrition (PN) is used for patients who cannot or should not get their nutrition through eating. PN may include a combination of sugar and carbohydrates (for energy), proteins (for muscle strength), lipids (fat), electrolytes, and trace elements. Nutrients may contain all or some of these substances, depending on your condition. PN Constituents screen able facility user to view combination and definition of nutrients.



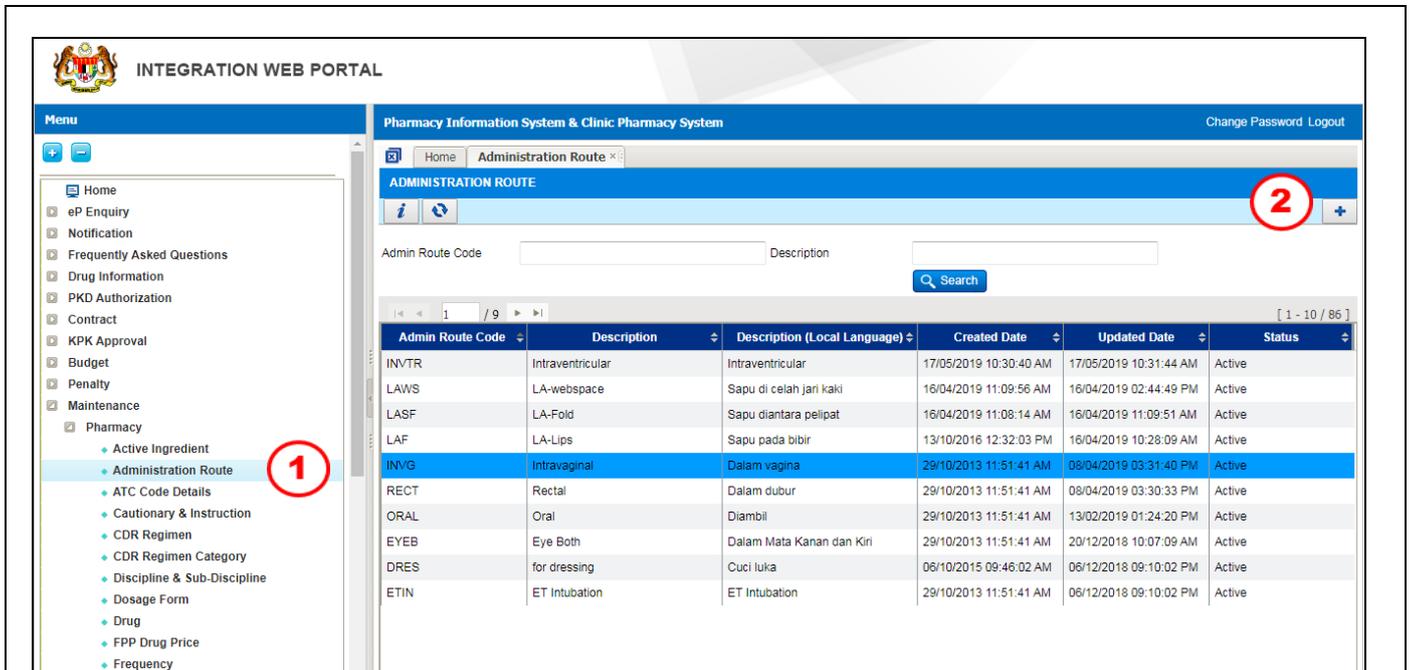
- **PN Source Contents**

The screen allows defining the value for the PN Generics content and value of calculation from ordering unit to volume unit. HQ setup will be based on the value and unit for each of ingredient based on type of PN Generics. On change of Generics, the list of Ingredients will change accordingly facility user able to select drug name and PN Type and view PN source content.

### 3.1 Administration Route

#### 3.1.1 Create New Administration Route

To Create New Administration Route records, perform the steps below:



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Administration Route

ADMINISTRATION ROUTE

Admin Route Code Description Search

Admin Route Code	Description	Description (Local Language)	Created Date	Updated Date	Status
INVTR	Intraventricular	Intraventricular	17/05/2019 10:30:40 AM	17/05/2019 10:31:44 AM	Active
LAWS	LA-webpace	Sapu di celah jari kaki	16/04/2019 11:09:56 AM	16/04/2019 02:44:49 PM	Active
LASF	LA-Fold	Sapu diantara pelipat	16/04/2019 11:08:14 AM	16/04/2019 11:09:51 AM	Active
LAF	LA-Lips	Sapu pada bibir	13/10/2016 12:32:03 PM	16/04/2019 10:28:09 AM	Active
INVG	Intravaginal	Dalam vagina	29/10/2013 11:51:41 AM	08/04/2019 03:31:40 PM	Active
RECT	Rectal	Dalam dubur	29/10/2013 11:51:41 AM	08/04/2019 03:30:33 PM	Active
ORAL	Oral	Diambil	29/10/2013 11:51:41 AM	13/02/2019 01:24:20 PM	Active
EYEB	Eye Both	Dalam Mata Kanan dan Kiri	29/10/2013 11:51:41 AM	20/12/2018 10:07:09 AM	Active
DRES	for dressing	Cuci luka	06/10/2015 09:46:02 AM	06/12/2018 09:10:02 PM	Active
ETIN	ET Intubation	ET Intubation	29/10/2013 11:51:41 AM	06/12/2018 09:10:02 PM	Active

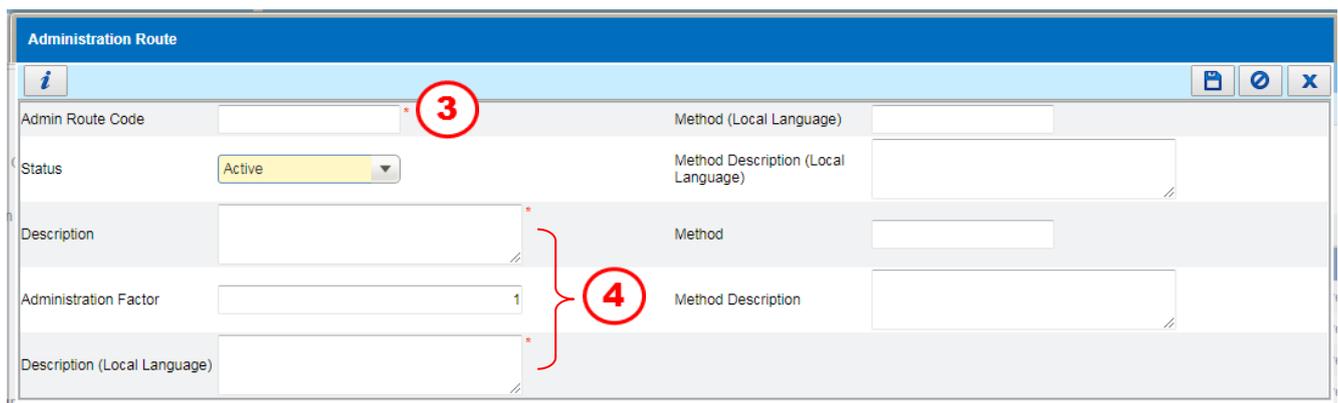
Figure 3.1.1-1 Administration Route Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on the Administration Route sub menu.

#### STEP 2

Click on the  button to create a new record and Administration Route screen will be displayed as Figure 3.1.1-2



Administration Route

Admin Route Code \* Method (Local Language)

Status Active Method Description (Local Language)

Description \* Method

Administration Factor 1 Method Description

Description (Local Language) \*

Figure 3.1.1-2 Administration Route Listing Page

#### STEP 3

Enter **Admin Route Code**

#### STEP 4

Enter **Description and Description (Local Language)**

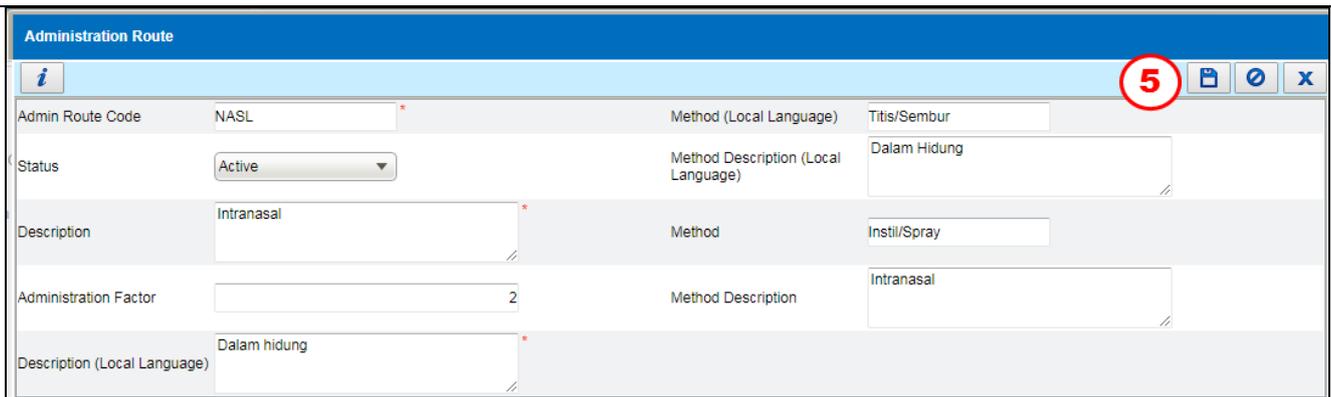


Figure 3.1.1-3 Administration Route Listing Page

### STEP 5

Click on the  button to save the record

### Note

- Enter **Method (Local Language)**, **Method Description (Local Language)**, **Method and Method Description** if needed.
- System will display a Confirmation Message as Figure 3.1.1-4

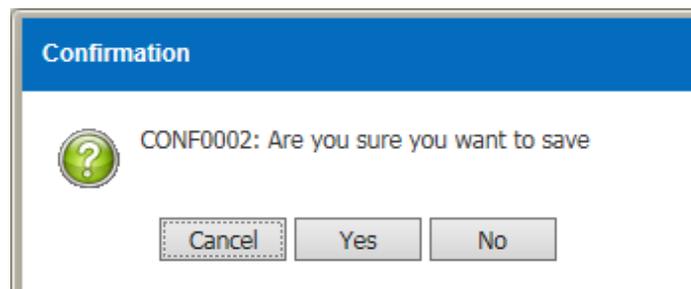
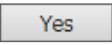
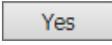


Figure 3.1.1-4 Confirmation Message

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.1.1-5

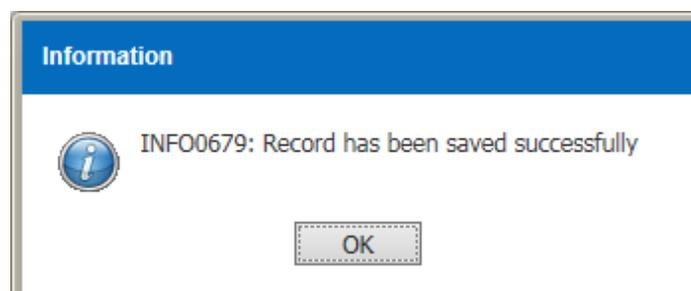
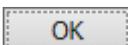
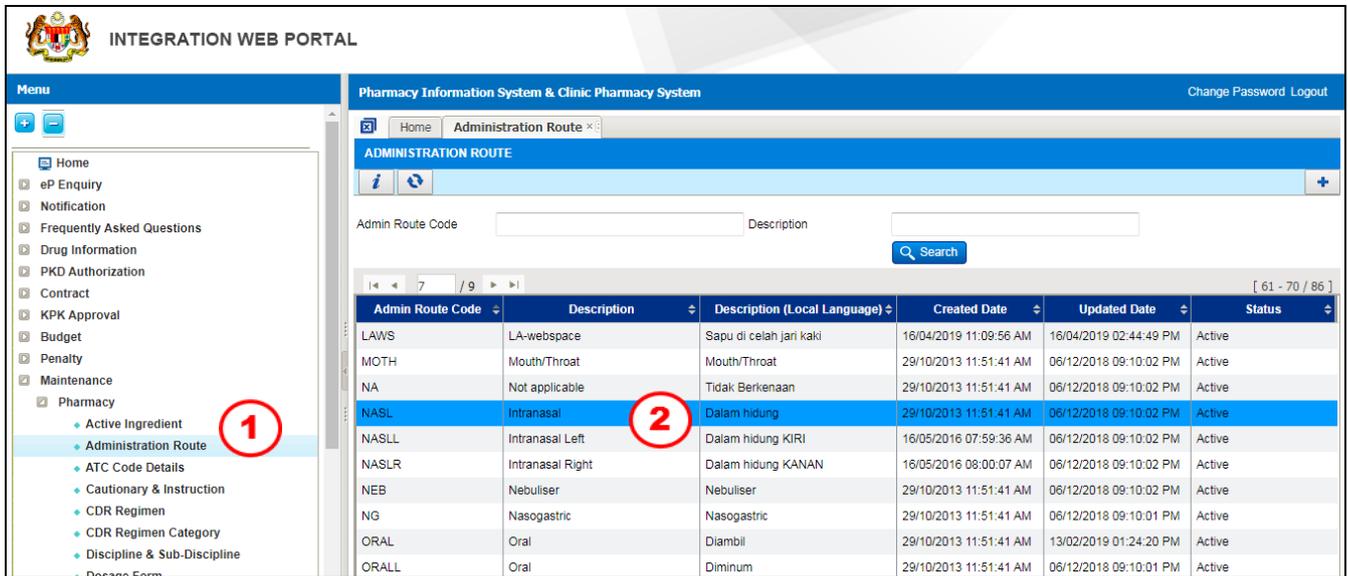


Figure 3.1.1-5 Information Message

- Click on the  button to confirmed the record

### 3.1.2 Modify Administration Route

To modify Administration Route records, perform the steps below:



Pharmacy Information System & Clinic Pharmacy System

ADMINISTRATION ROUTE

Admin Route Code	Description	Description (Local Language)	Created Date	Updated Date	Status
LAWS	LA-webpage	Sapu di celah jari kaki	16/04/2019 11:09:56 AM	16/04/2019 02:44:49 PM	Active
MOTH	Mouth/Throat	Mouth/Throat	29/10/2013 11:51:41 AM	06/12/2018 09:10:02 PM	Active
NA	Not applicable	Tidak Berkenaan	29/10/2013 11:51:41 AM	06/12/2018 09:10:02 PM	Active
<b>NASL</b>	<b>Intranasal</b>	<b>Dalam hidung</b>	29/10/2013 11:51:41 AM	06/12/2018 09:10:02 PM	Active
NASLL	Intranasal Left	Dalam hidung KIRI	16/05/2016 07:59:36 AM	06/12/2018 09:10:02 PM	Active
NASLR	Intranasal Right	Dalam hidung KANAN	16/05/2016 08:00:07 AM	06/12/2018 09:10:02 PM	Active
NEB	Nebuliser	Nebuliser	29/10/2013 11:51:41 AM	06/12/2018 09:10:02 PM	Active
NG	Nasogastric	Nasogastric	29/10/2013 11:51:41 AM	06/12/2018 09:10:01 PM	Active
ORAL	Oral	Diambil	29/10/2013 11:51:41 AM	13/02/2019 01:24:20 PM	Active
ORALL	Oral	Diminum	29/10/2013 11:51:41 AM	06/12/2018 09:10:01 PM	Active

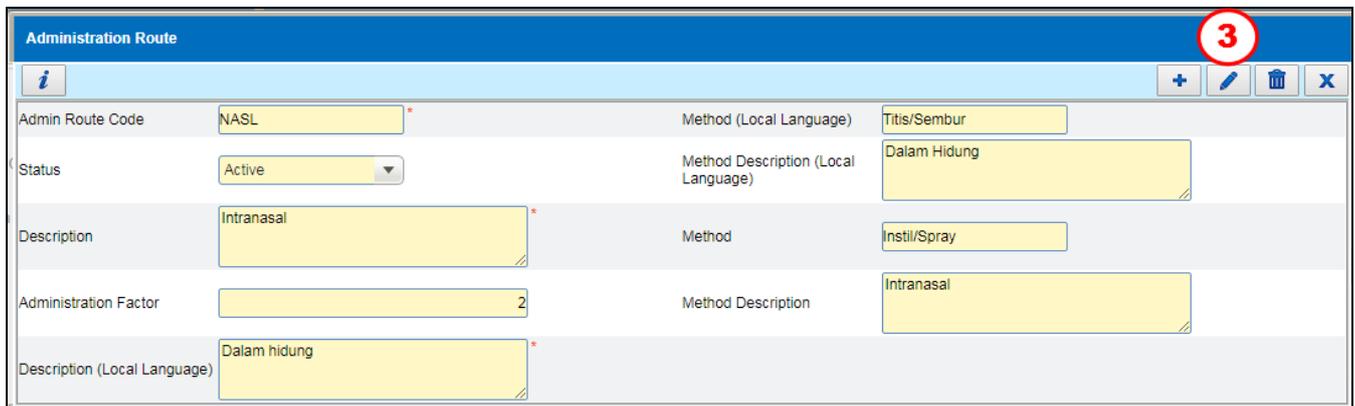
Figure 3.1.2-1 Administration Route Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on the Administration Route sub menu.

#### STEP 2

Double click on selected record



Administration Route

Admin Route Code: NASL \*      Method (Local Language): Titis/Sembur

Status: Active      Method Description (Local Language): Dalam Hidung

Description: Intranasal \*      Method: Instil/Spray

Administration Factor: 2      Method Description: Intranasal

Description (Local Language): Dalam hidung \*

Figure 3.1.2-2 Administration Route

#### STEP 3

Click on the  button to edit the record

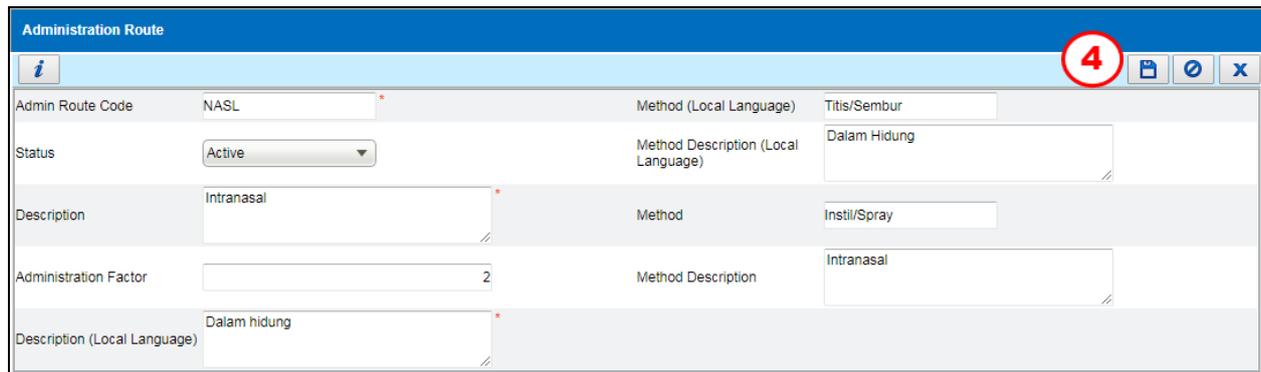


Figure 3.1.2-3 Administration Route

**Note**

User is allowing to edit:

- **Admin Route Code**
- **Status**
- **Description**
- **Administration Factor**
- **Description (Local Language)**
- **Method (Local Language)**
- **Method Description (Local Language)**
- **Method**
- **Method Description**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.1.2-4

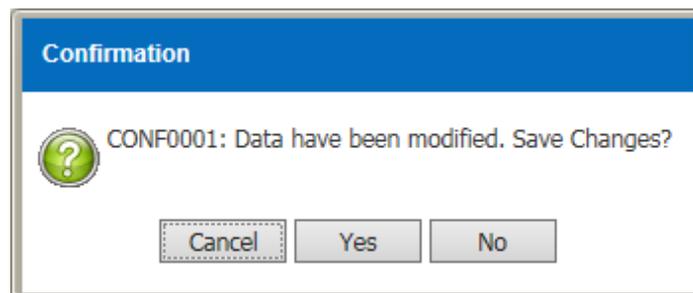
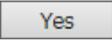
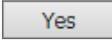
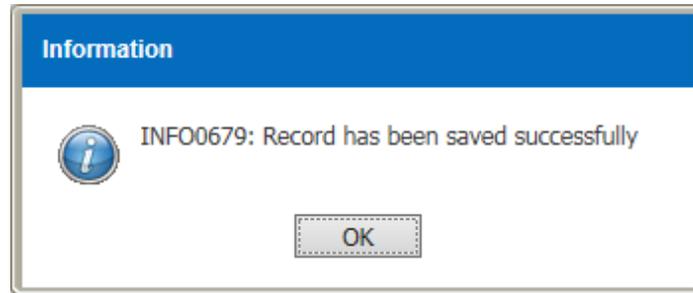
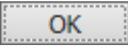


Figure 3.1.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.1.2-5



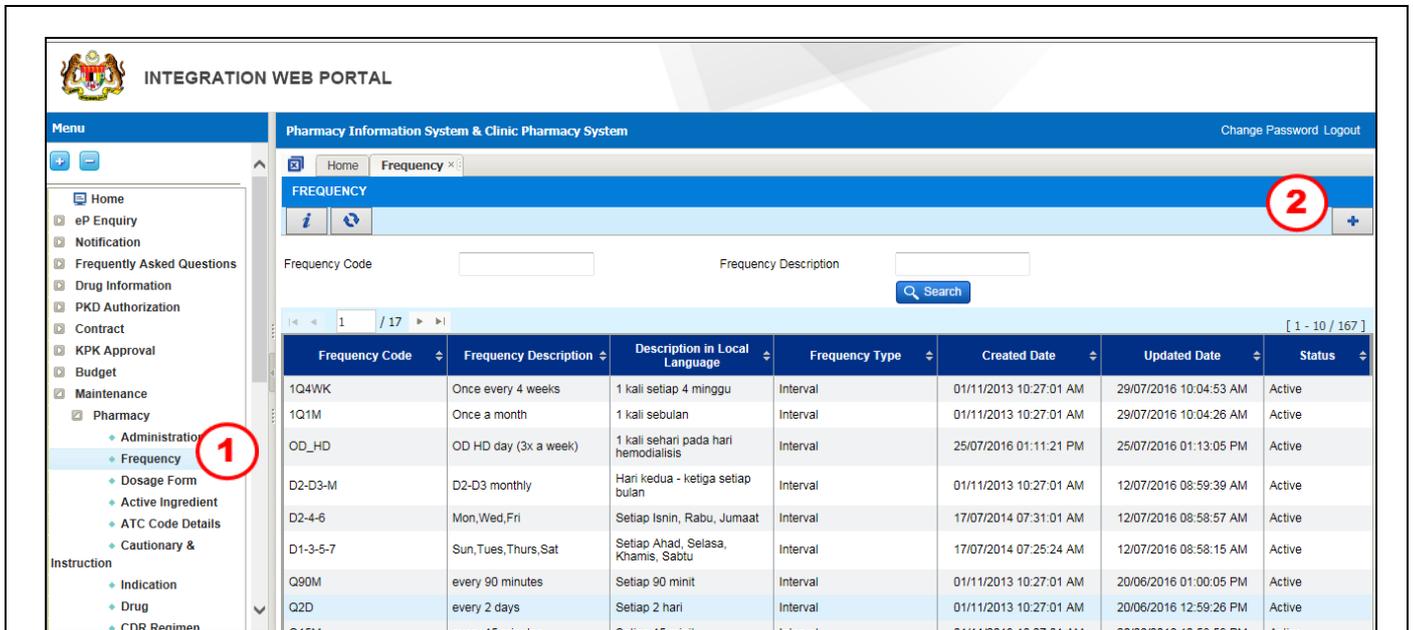
**Figure 3.1.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.2 Frequency

#### 3.2.1 Create New Frequency

To Create New Frequency records, perform the steps below:



Frequency Code	Frequency Description	Description in Local Language	Frequency Type	Created Date	Updated Date	Status
1Q4WK	Once every 4 weeks	1 kali setiap 4 minggu	Interval	01/11/2013 10:27:01 AM	29/07/2016 10:04:53 AM	Active
1Q1M	Once a month	1 kali sebulan	Interval	01/11/2013 10:27:01 AM	29/07/2016 10:04:26 AM	Active
OD_HD	OD HD day (3x a week)	1 kali sehari pada hari hemodialisis	Interval	25/07/2016 01:11:21 PM	25/07/2016 01:13:05 PM	Active
D2-D3-M	D2-D3 monthly	Hari kedua - ketiga setiap bulan	Interval	01/11/2013 10:27:01 AM	12/07/2016 08:59:39 AM	Active
D2-4-6	Mon,Wed,Fri	Setiap Isnin, Rabu, Jumaat	Interval	17/07/2014 07:31:01 AM	12/07/2016 08:58:57 AM	Active
D1-3-5-7	Sun,Tues,Thurs,Sat	Setiap Ahad, Selasa, Khamis, Sabtu	Interval	17/07/2014 07:25:24 AM	12/07/2016 08:58:15 AM	Active
Q90M	every 90 minutes	Setiap 90 minit	Interval	01/11/2013 10:27:01 AM	20/06/2016 01:00:05 PM	Active
Q2D	every 2 days	Setiap 2 hari	Interval	01/11/2013 10:27:01 AM	20/06/2016 12:59:26 PM	Active

Figure 3.2.1-1 Frequency Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Frequency sub menu.

#### STEP 2

Click on the  button and Frequency screen will be displayed as Figure 3.2.1-2

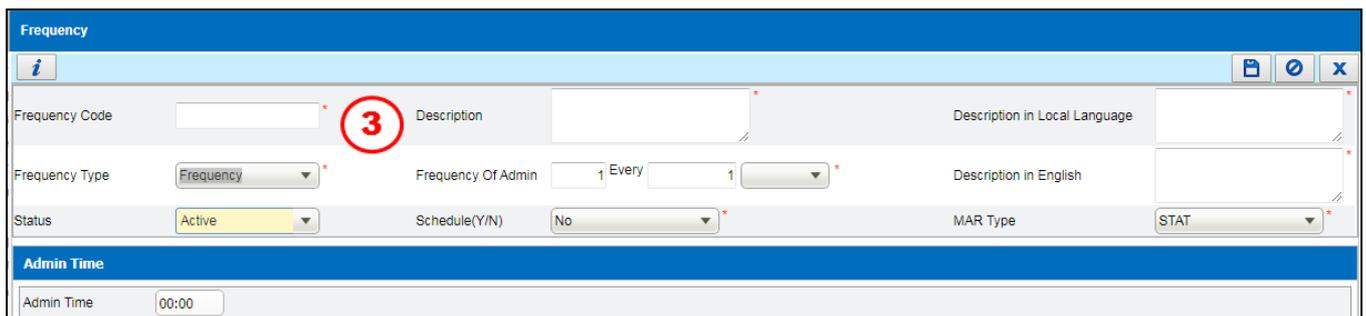
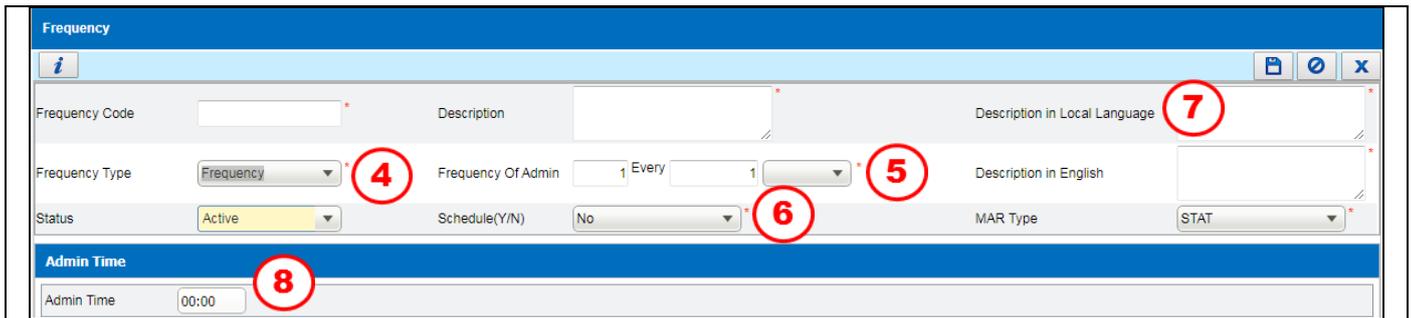


Figure 3.2.1-2 Frequency

#### STEP 3

Enter **Frequency Code**, **Frequency Type** and **Description**



The screenshot shows a web form titled "Frequency" with the following fields and callouts:

- 4**: Frequency Type dropdown menu.
- 5**: Frequency Of Admin dropdown menu (set to "1 Every 1").
- 6**: Schedule(Y/N) dropdown menu (set to "No").
- 7**: Description in Local Language text area.
- 8**: Admin Time input field (set to "00:00").

Other visible fields include: Frequency Code, Description, Description in English, Status (Active), and MAR Type (STAT).

Figure 3.2.1-3 Frequency

**STEP 4**

Select **Frequency** from drop down box:

- **Continuous**
- **Frequency**
- **Interval**
- **PRN**
- **STAT**

**STEP 5**

Fill the **Frequency of Admin**

**STEP 6**

Click on the Dropdown Box to choose the **Schedule** status:

- **Yes**
- **No**

**STEP 7**

Fill the **Description in Local Language** and **Description in English**

**STEP 8**

Fill the **Admin Time**

**Note**

*Admin Time will be based on **Frequency of Admin** and **Schedule** status is **Yes***

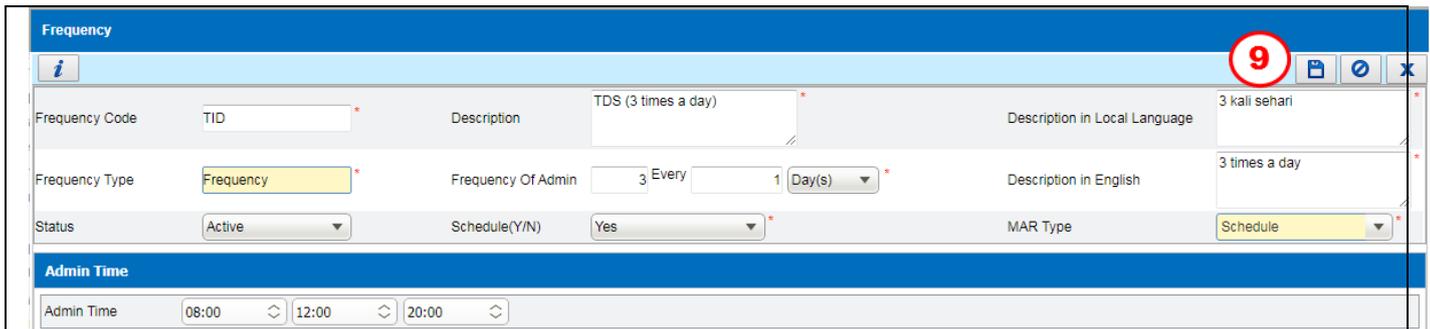


Figure 3.2.1-4 Frequency

**STEP 9**

Click on the  button to save the record

**Note**

- Confirmation message as shown in Figure 3.2.1-5 will be displayed after user save the record

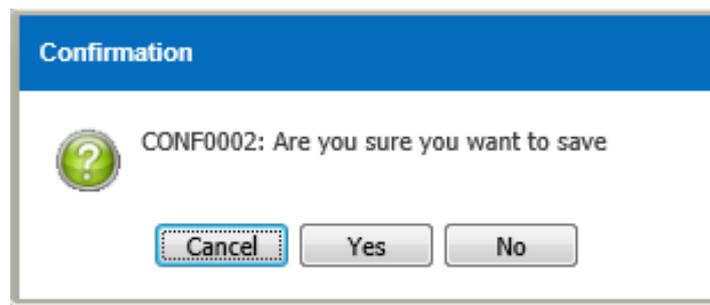


Figure 3.2.1-5 Confirmation Message

- Record will save when user click on the  button as shown in Figure 3.2.1-6

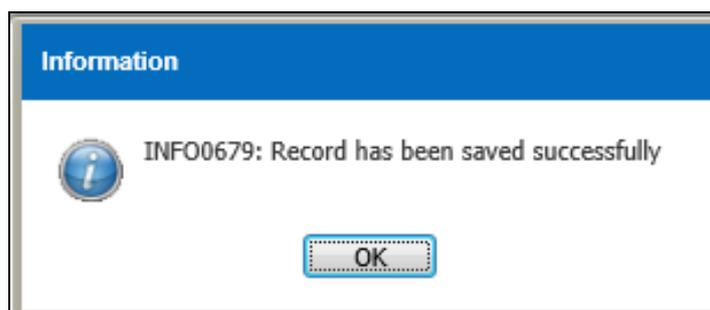
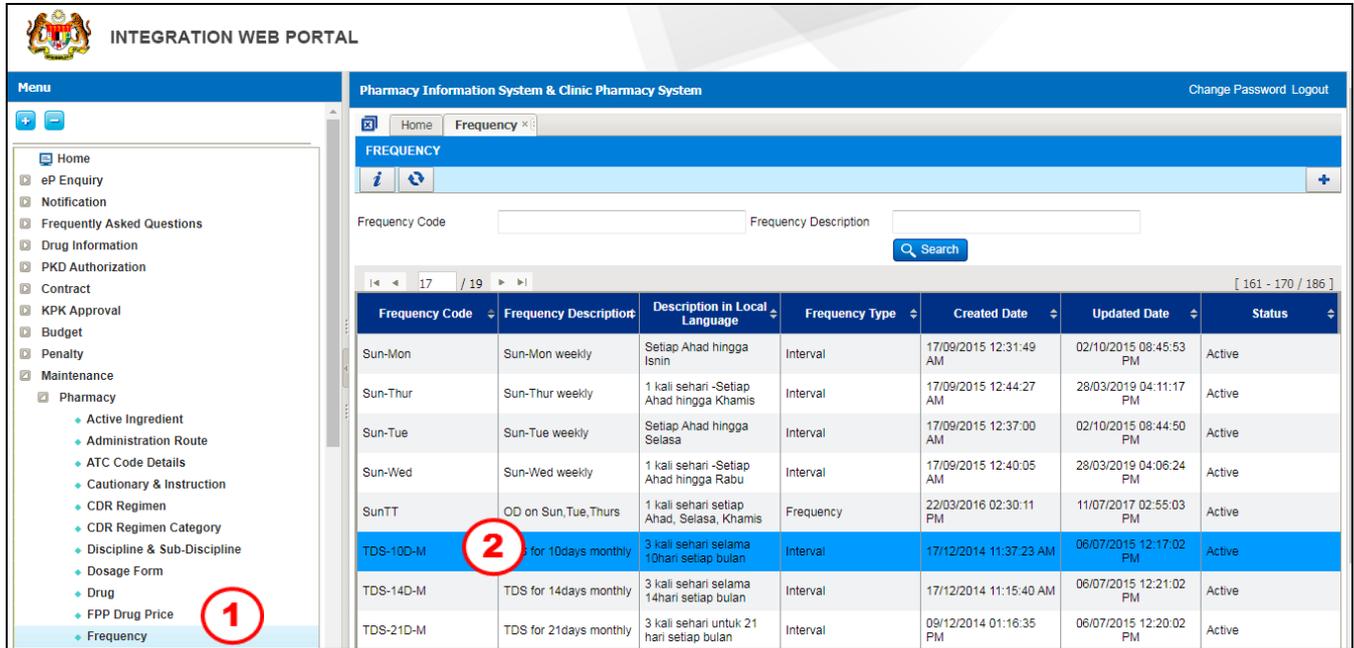


Figure 3.2.1-6 Information Message

- Click on the  button to close the Frequency screen.

### 3.2.2 Modify Frequency

To modify Frequency records, perform the steps below:



Frequency Code	Frequency Description	Description in Local Language	Frequency Type	Created Date	Updated Date	Status
Sun-Mon	Sun-Mon weekly	Setiap Ahad hingga Isnin	Interval	17/09/2015 12:31:49 AM	02/10/2015 08:45:53 PM	Active
Sun-Thur	Sun-Thur weekly	1 kali sehari -Setiap Ahad hingga Khamis	Interval	17/09/2015 12:44:27 AM	28/03/2019 04:11:17 PM	Active
Sun-Tue	Sun-Tue weekly	Setiap Ahad hingga Selasa	Interval	17/09/2015 12:37:00 AM	02/10/2015 08:44:50 PM	Active
Sun-Wed	Sun-Wed weekly	1 kali sehari -Setiap Ahad hingga Rabu	Interval	17/09/2015 12:40:05 AM	28/03/2019 04:06:24 PM	Active
SunTT	OD on Sun,Tue,Thurs	1 kali sehari setiap Ahad, Selasa, Khamis	Frequency	22/03/2016 02:30:11 PM	11/07/2017 02:55:03 PM	Active
TDS-10D-M	for 10days monthly	3 kali sehari selama 10hari setiap bulan	Interval	17/12/2014 11:37:23 AM	06/07/2015 12:17:02 PM	Active
TDS-14D-M	TDS for 14days monthly	3 kali sehari selama 14hari setiap bulan	Interval	17/12/2014 11:15:40 AM	06/07/2015 12:21:02 PM	Active
TDS-21D-M	TDS for 21days monthly	3 kali sehari untuk 21 hari setiap bulan	Interval	09/12/2014 01:16:35 PM	06/07/2015 12:20:02 PM	Active

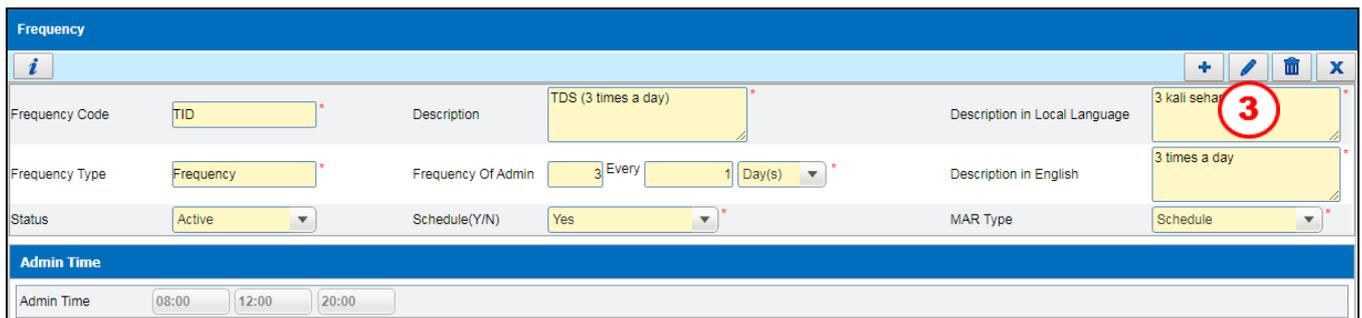
Figure 3.2.2-1 Frequency Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Frequency sub menu.

#### STEP 2

Double click on selected record



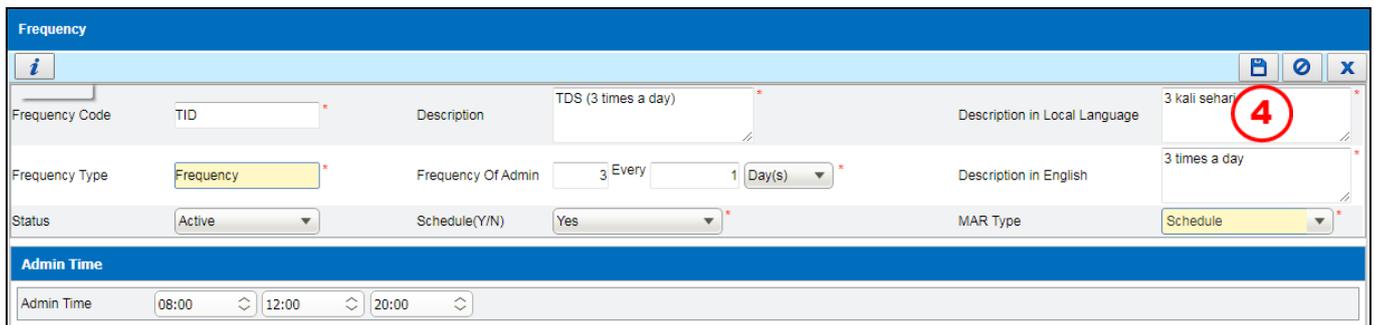
Frequency Code: TID \*  
 Description: TDS (3 times a day) \*  
 Description in Local Language: 3 kali sehari \*  
 Frequency Type: Frequency \*  
 Frequency Of Admin: 3 Every 1 Day(s) \*  
 Description in English: 3 times a day \*  
 Status: Active \*  
 Schedule(Y/N): Yes \*  
 MAR Type: Schedule \*

Admin Time: 08:00 12:00 20:00

Figure 3.2.2-2 Frequency.

#### STEP 3

Click on the  button to edit the record



Frequency			
Frequency Code	TID	Description	TDS (3 times a day)
Frequency Type	Frequency	Frequency Of Admin	3 Every 1 Day(s)
Status	Active	Schedule(Y/N)	Yes
Admin Time		08:00 12:00 20:00	

Figure 3.2.2-3 Frequency

**Note**

User is allowed to edit:

- **Frequency Code**
- **Description**
- **Frequency Of Admin**
- **Status**
- **Schedule(Y/N)**
- **Description in Local Language**
- **Description in English**
- **Admin Time**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.2.2-4

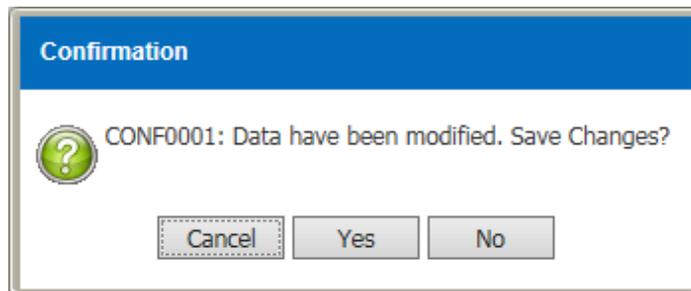
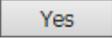
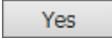
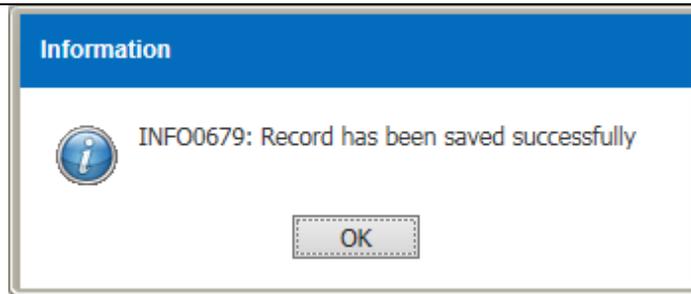


Figure 3.2.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.2.2-5



**Figure 3.2.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.3 Dosage Form

#### 3.3.1 Create New Dosage Form

To Create New Dosage Form records, perform the steps below:

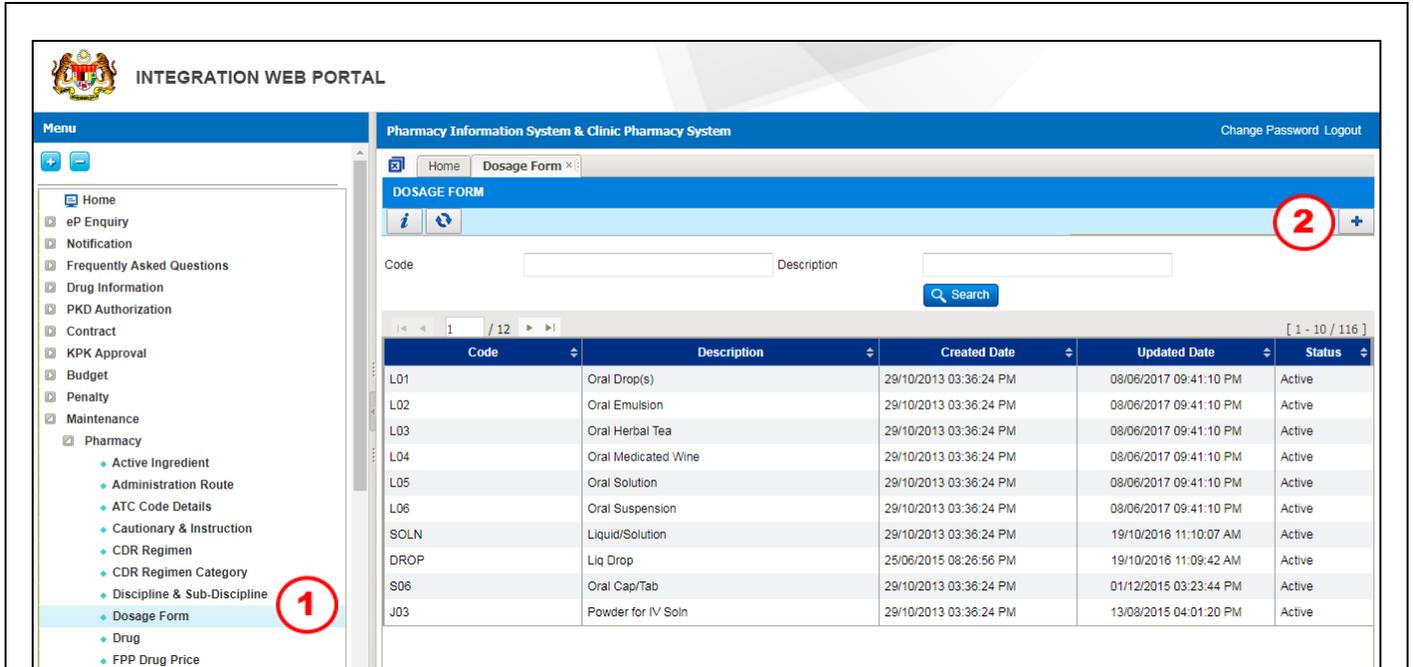


Figure 3.3.1-1 Dosage Form Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Dosage Form sub menu.

#### STEP 2

Click on the  button to create a new record and Dosage Form screen will be displayed as Figure 3.3.1-2

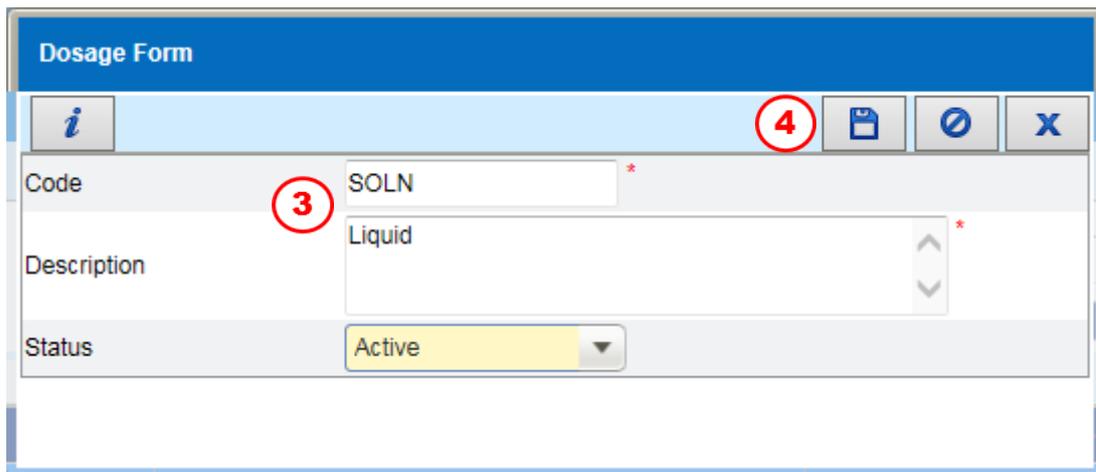


Figure 3.3.1-2 Add Dosage Form

#### STEP 3

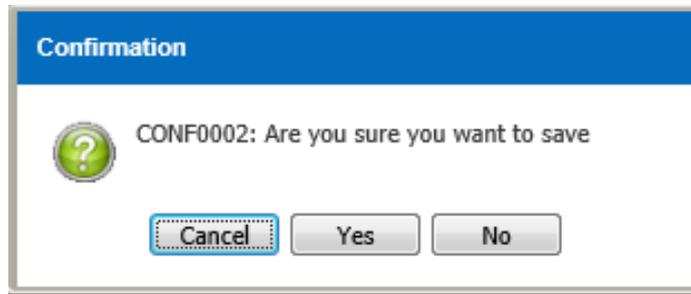
Enter **Code** and **Description**

#### STEP 4

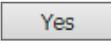
Click on the  button to save the record

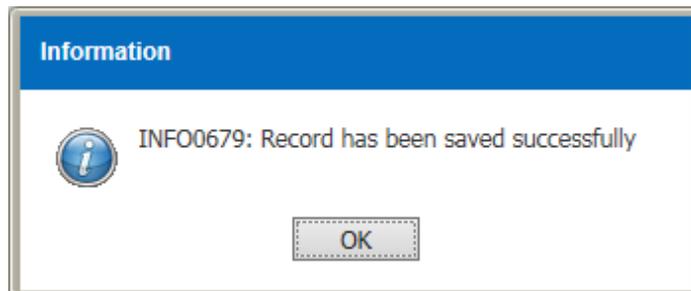
**Note**

- System will display a Confirmation Message as Figure 3.3.1-3

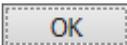


**Figure 3.3.1-3 Confirmation Message**

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.3.1-4

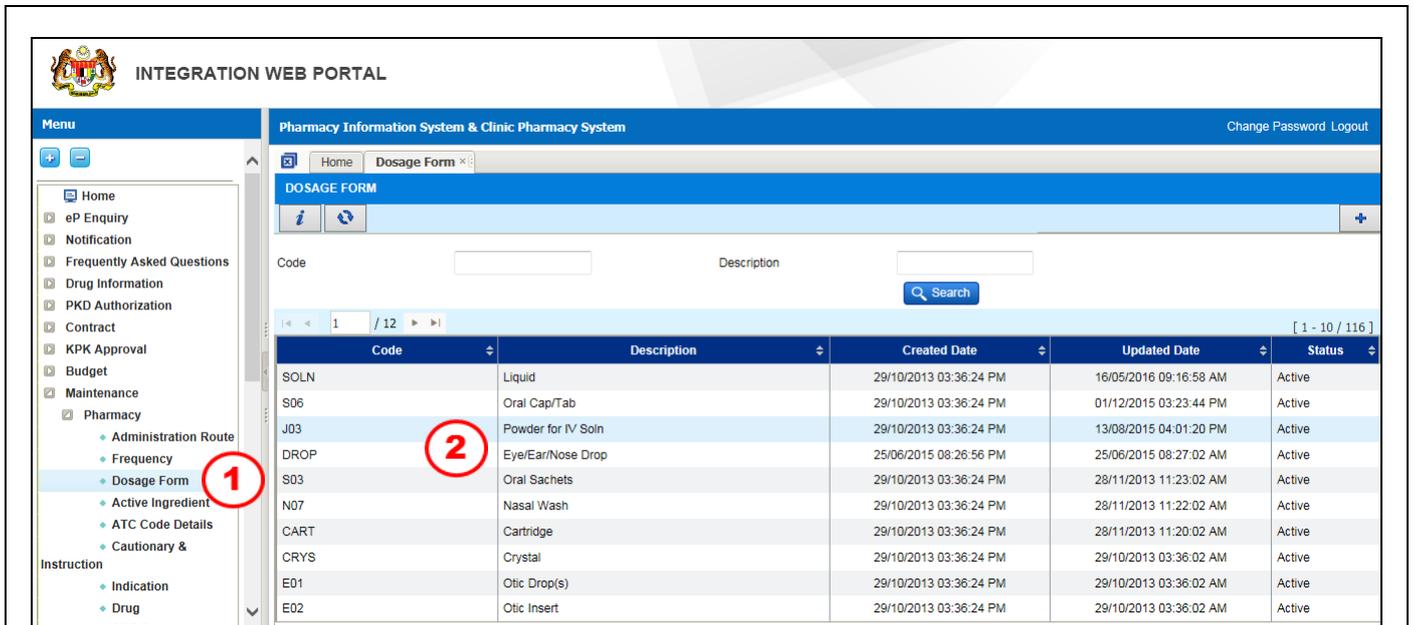


**Figure 3.3.1-4 Information Message**

- Click on the  button to confirmed the record

### 3.3.2 Update Dosage Form

To modify Dosage Form records, perform the steps below:



Code	Description	Created Date	Updated Date	Status
SOLN	Liquid	29/10/2013 03:36:24 PM	16/05/2016 09:16:58 AM	Active
S06	Oral Cap/Tab	29/10/2013 03:36:24 PM	01/12/2015 03:23:44 PM	Active
J03	Powder for IV Soln	29/10/2013 03:36:24 PM	13/08/2015 04:01:20 PM	Active
DROP	Eye/Ear/Nose Drop	25/06/2015 08:26:56 PM	25/06/2015 08:27:02 AM	Active
S03	Oral Sachets	29/10/2013 03:36:24 PM	28/11/2013 11:23:02 AM	Active
N07	Nasal Wash	29/10/2013 03:36:24 PM	28/11/2013 11:22:02 AM	Active
CART	Cartridge	29/10/2013 03:36:24 PM	28/11/2013 11:20:02 AM	Active
CRYS	Crystal	29/10/2013 03:36:24 PM	29/10/2013 03:36:02 AM	Active
E01	Otic Drop(s)	29/10/2013 03:36:24 PM	29/10/2013 03:36:02 AM	Active
E02	Otic Insert	29/10/2013 03:36:24 PM	29/10/2013 03:36:02 AM	Active

Figure 3.3.2-1 Dosage Form Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Dosage Form sub menu

#### STEP 2

Click on the selected record

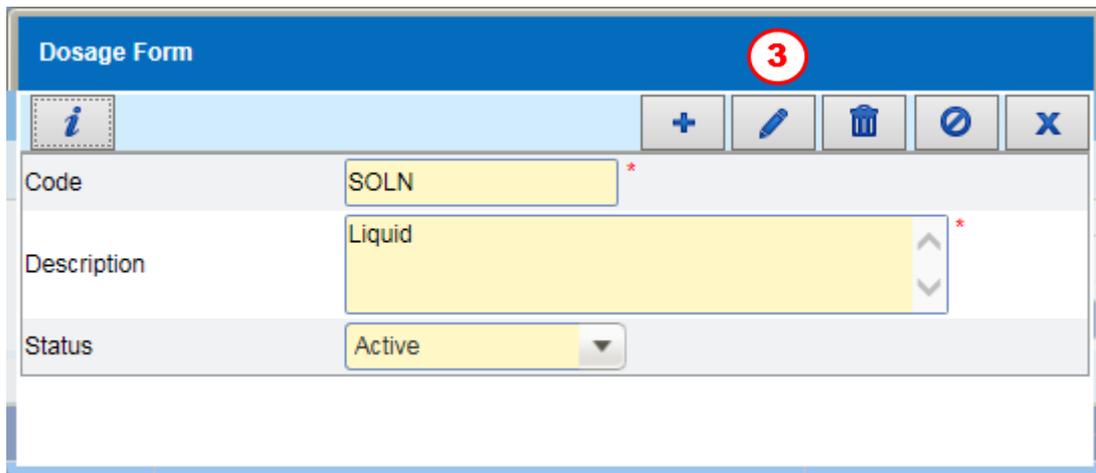


Figure 3.3.2-2 Add Dosage Form

#### STEP 3

Click on the  button to edit the record

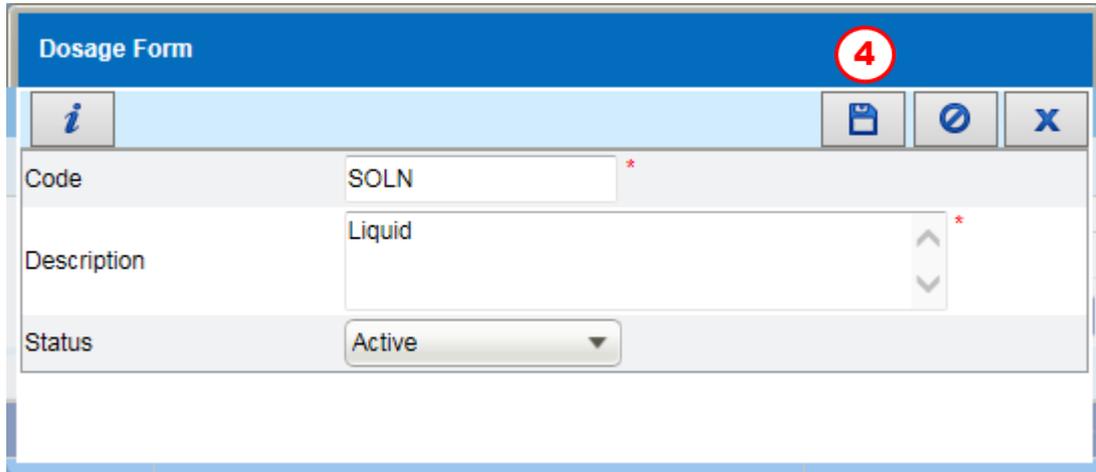


Figure 3.3.2-2 Add Dosage Form

**Note**

User is allowing to edit:

- **Code**
- **Description**
- **Status**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.3.2-3

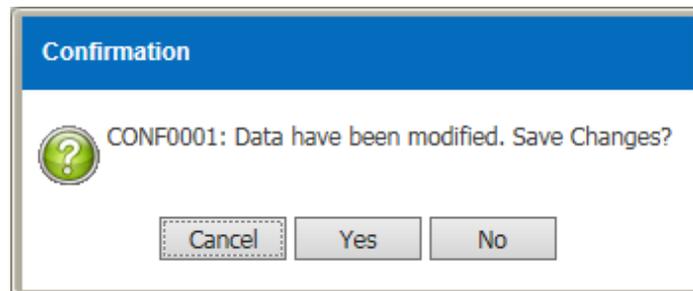
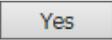
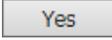


Figure 3.3.2-3 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.3.2-4

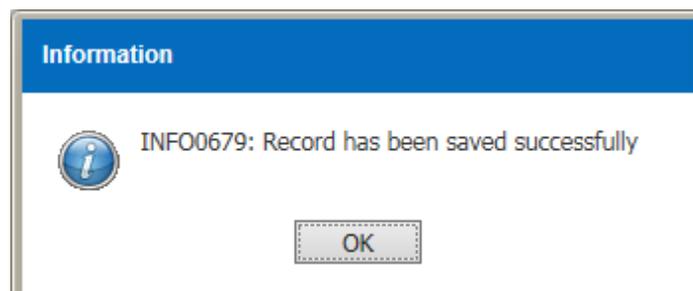
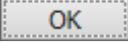


Figure 3.3.2-4 Information Message

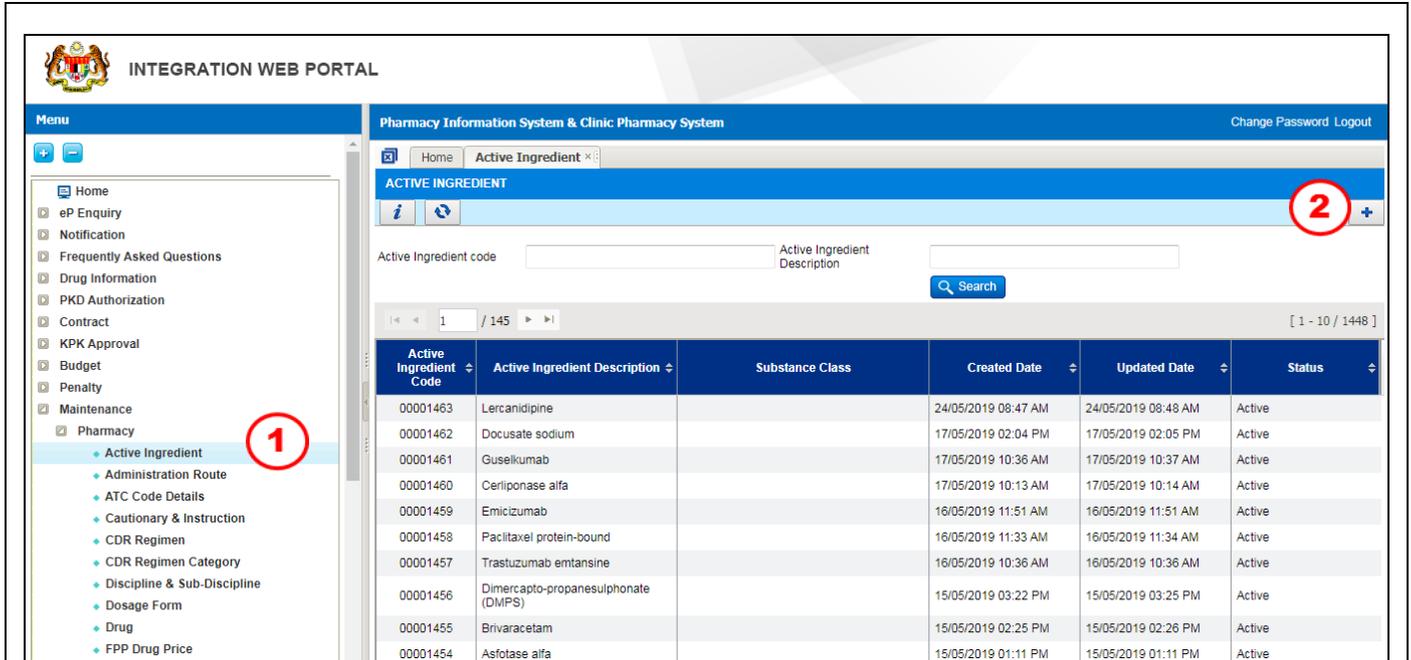


- Click on the  button to confirmed the edited record

### 3.4 Active Ingredient

#### 3.4.1 Create New Active Ingredient

To Create New Active Ingredient records, perform the steps below:



Active Ingredient Code	Active Ingredient Description	Substance Class	Created Date	Updated Date	Status
00001463	Lercanidipine		24/05/2019 08:47 AM	24/05/2019 08:48 AM	Active
00001462	Docusate sodium		17/05/2019 02:04 PM	17/05/2019 02:05 PM	Active
00001461	Guselkumab		17/05/2019 10:36 AM	17/05/2019 10:37 AM	Active
00001460	Cerliponase alfa		17/05/2019 10:13 AM	17/05/2019 10:14 AM	Active
00001459	Emicizumab		16/05/2019 11:51 AM	16/05/2019 11:51 AM	Active
00001458	Paclitaxel protein-bound		16/05/2019 11:33 AM	16/05/2019 11:34 AM	Active
00001457	Trastuzumab emtansine		16/05/2019 10:36 AM	16/05/2019 10:36 AM	Active
00001456	Dimercapto-propanesulphonate (DMPS)		15/05/2019 03:22 PM	15/05/2019 03:25 PM	Active
00001455	Brivaracetam		15/05/2019 02:25 PM	15/05/2019 02:26 PM	Active
00001454	Asfotase alfa		15/05/2019 01:11 PM	15/05/2019 01:11 PM	Active

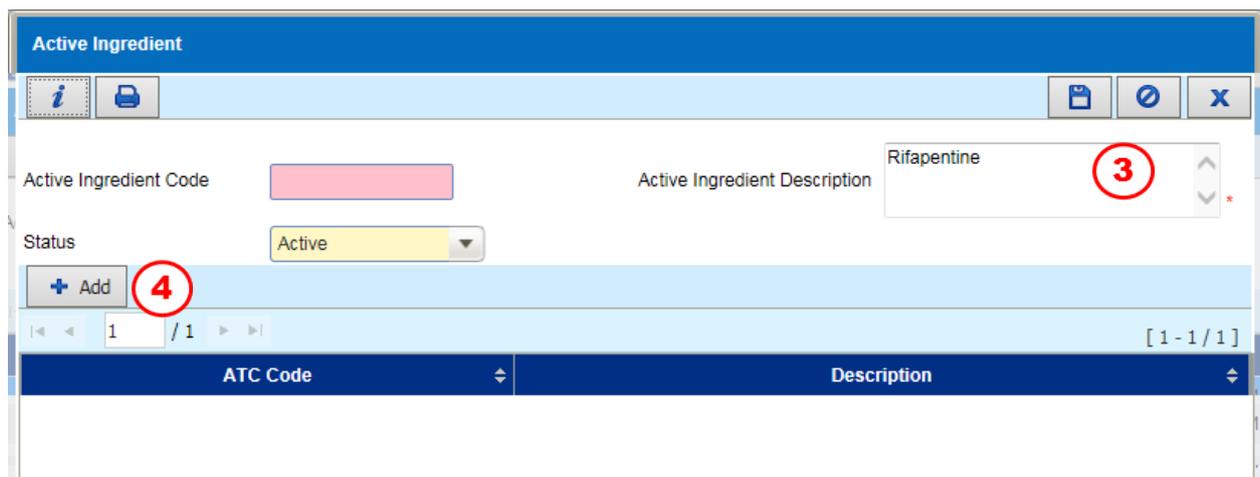
Figure 3.4.1-1 Active Ingredient Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Active Ingredient sub menu.

#### STEP 2

Click on the  button to create a new record and Active Ingredient screen will be displayed as Figure 3.4.1-2



ATC Code	Description
----------	-------------

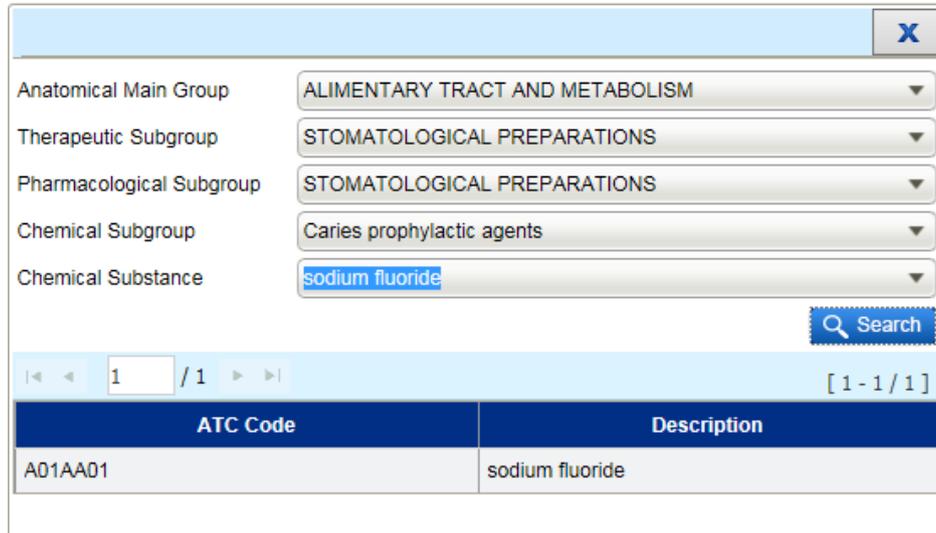
Figure 3.4.1-2 Add Active Ingredient

#### STEP 3

Enter **Active Ingredient Description**

**STEP 4**

Click on the  button and new window will be displayed as Figure 3.4.1-3

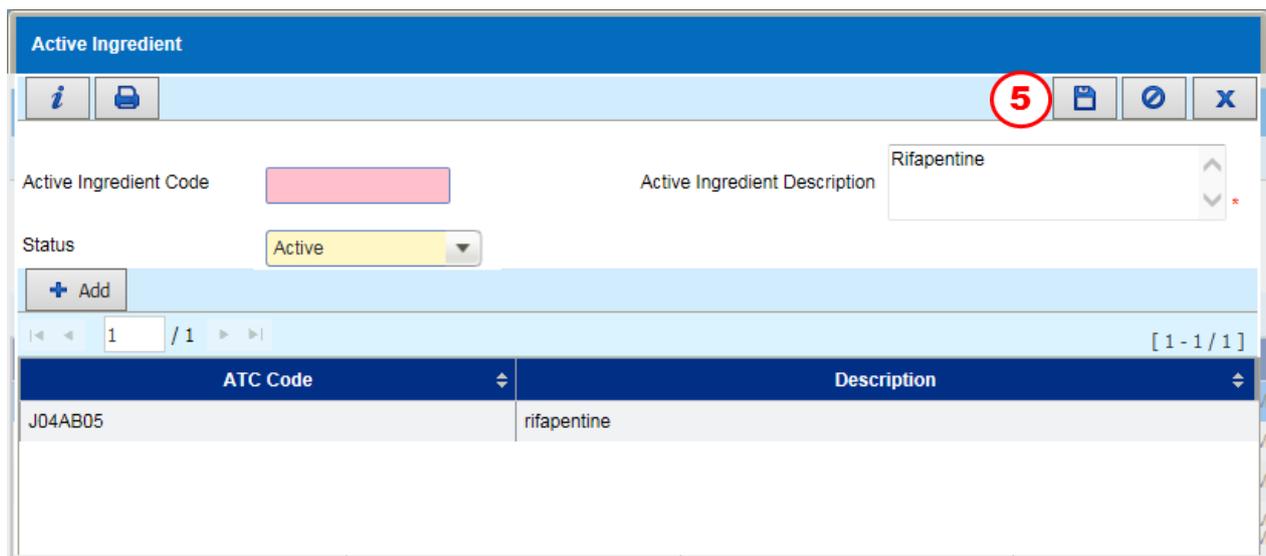


ATC Code	Description
AD1AA01	sodium fluoride

**Figure 3.4.1-3 ATC Code**

**Note**

- User is allowed to enter partially or fully criteria for :
  - **Anatomical Main Group**
  - **Therapeutic Subgroup**
  - **Pharmacological Subgroup**
  - **Chemical Subgroup**
  - **Chemical Substance**
- Click on the  button and double click on the selected **ATC Code/Description**
- Selected data will have updated in the Active Ingredient screen as shown in Figure 3.4.1-4



ATC Code	Description
J04AB05	rifapentine

**Figure 3.4.1-4 Active Ingredient**

**Note**

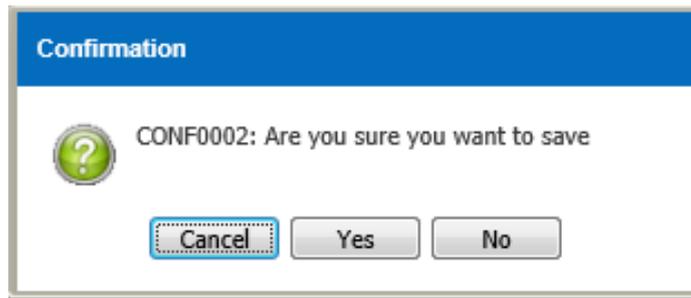
User can add more than 1 **ATC Code** by repeating **STEP 4**

**STEP 5**

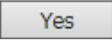
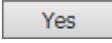
Click on the  button to save the record

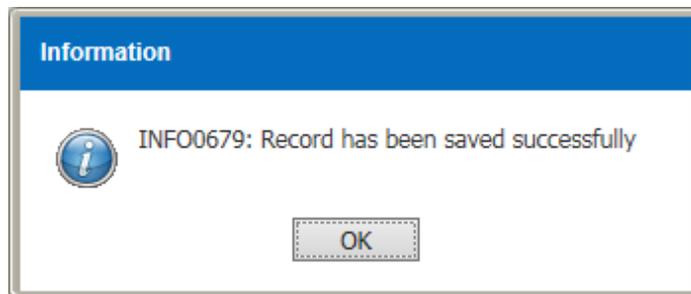
**Note**

- System will display a Confirmation Message as Figure 3.4.1-5

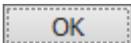


**Figure 3.4.1-5 Confirmation Message**

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.4.1-6



**Figure 3.4.1-6 Information Message**

- Click on the  button to confirmed the record and **Active Ingredient Code** will be generated for future reference as Figure 3.4.1-7

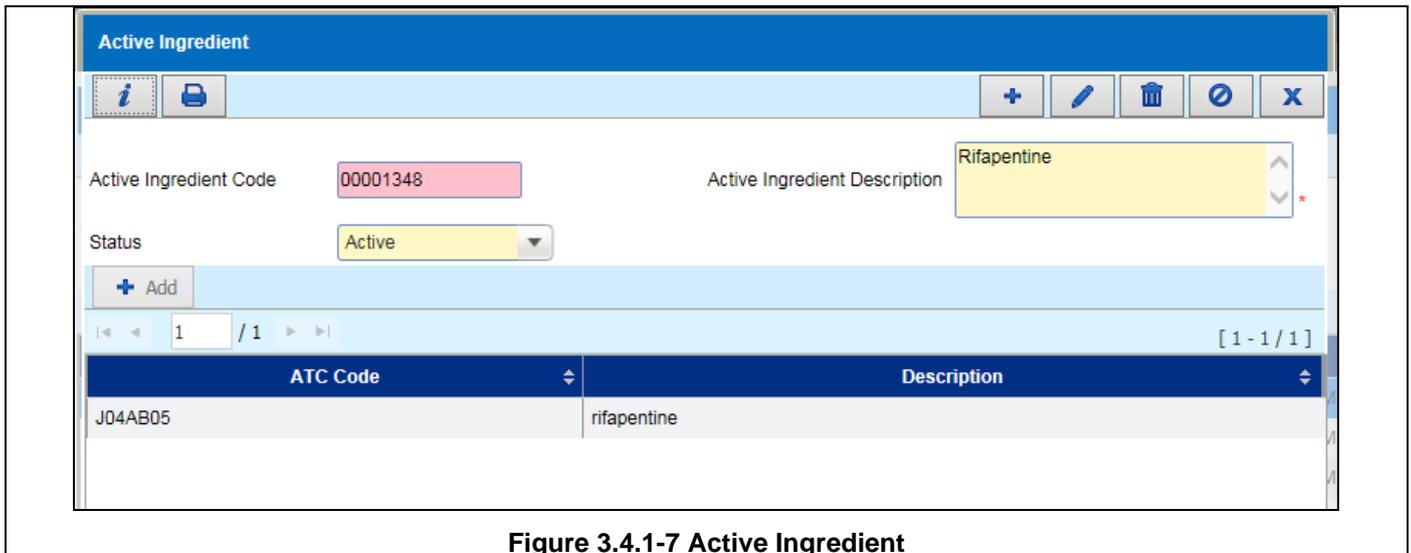


Figure 3.4.1-7 Active Ingredient

### 3.4.2 Modify Active Ingredient

To modify Active Ingredient records, perform the steps below:

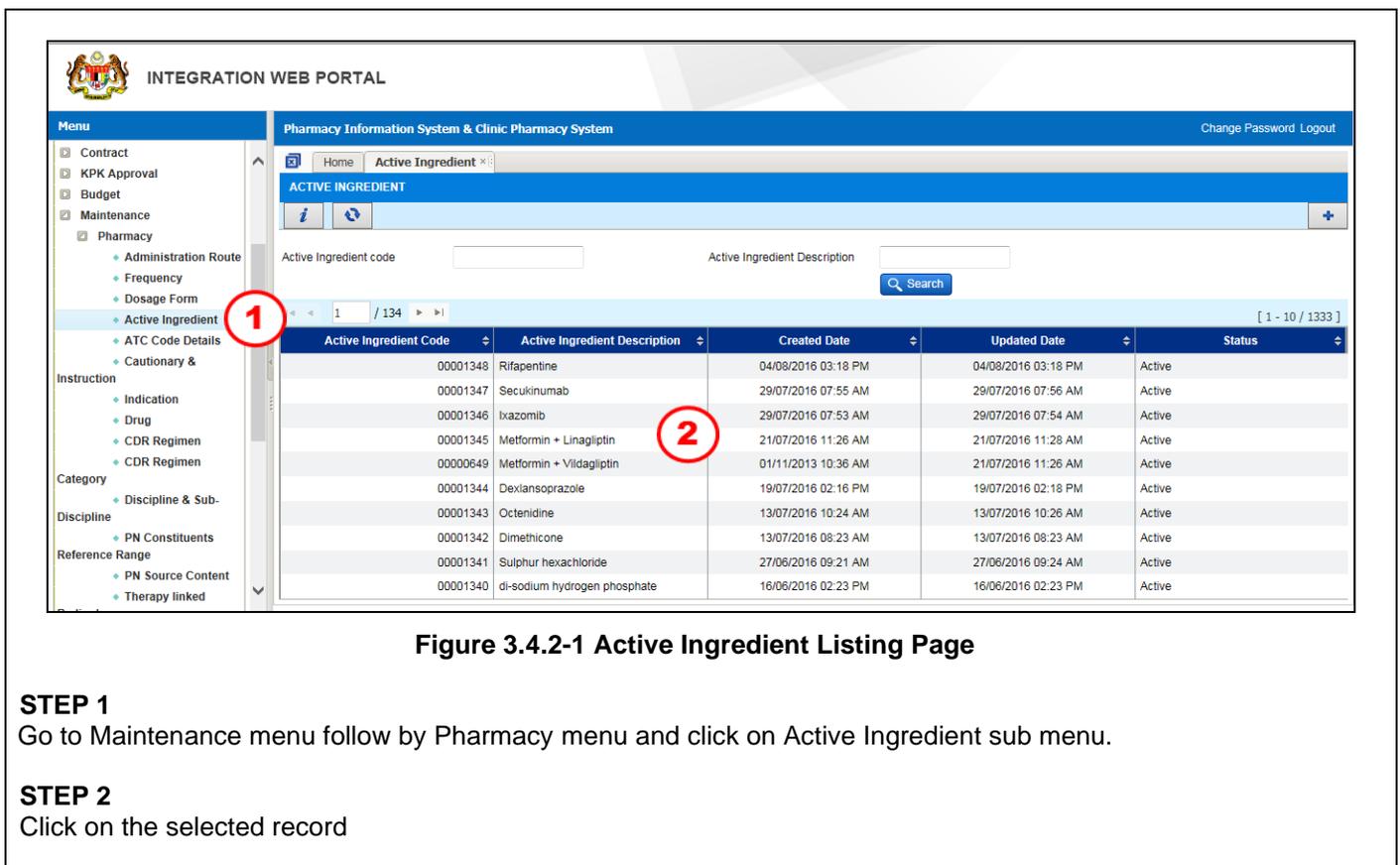


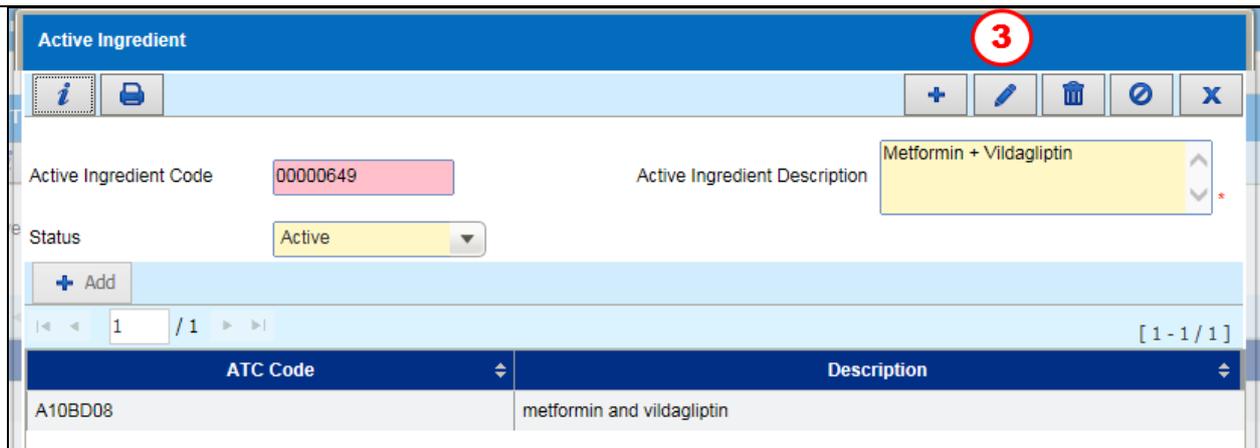
Figure 3.4.2-1 Active Ingredient Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Active Ingredient sub menu.

#### STEP 2

Click on the selected record



The screenshot shows the 'Active Ingredient' form. At the top right, a red circle with the number '3' highlights the edit button (pencil icon). The form contains the following fields:

- Active Ingredient Code: 00000649
- Active Ingredient Description: Metformin + Vildagliptin
- Status: Active

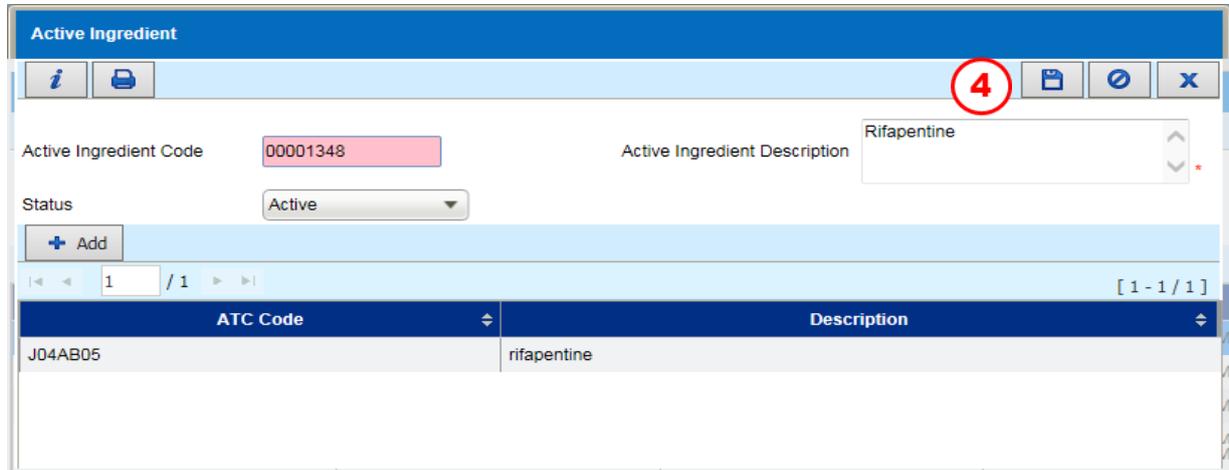
Below the form is a table with the following data:

ATC Code	Description
A10BD08	metformin and vildagliptin

Figure 3.4.2-2 Active Indgredient Form

**STEP 3**

Click on the  button to edit the record



The screenshot shows the 'Active Ingredient' form after editing. At the top right, a red circle with the number '4' highlights the save button (floppy disk icon). The form contains the following fields:

- Active Ingredient Code: 00001348
- Active Ingredient Description: Rifapentine
- Status: Active

Below the form is a table with the following data:

ATC Code	Description
J04AB05	rifapentine

Figure 3.4.2-3 Active Indgredient Form

**Note**

User is allowing to edit:

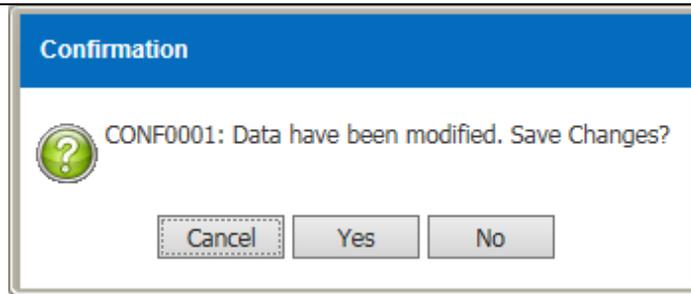
- **Status**
- **Active Ingredient Description**
- **Add ATC Code**

**STEP 4**

Click on the  button to save the edited record

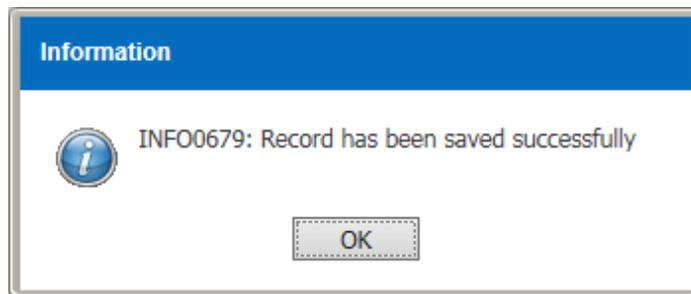
**Note**

- System will display a Confirmation Message as Figure 3.4.2-4



**Figure 3.4.2-4 Confirmation Message**

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.4.2-5



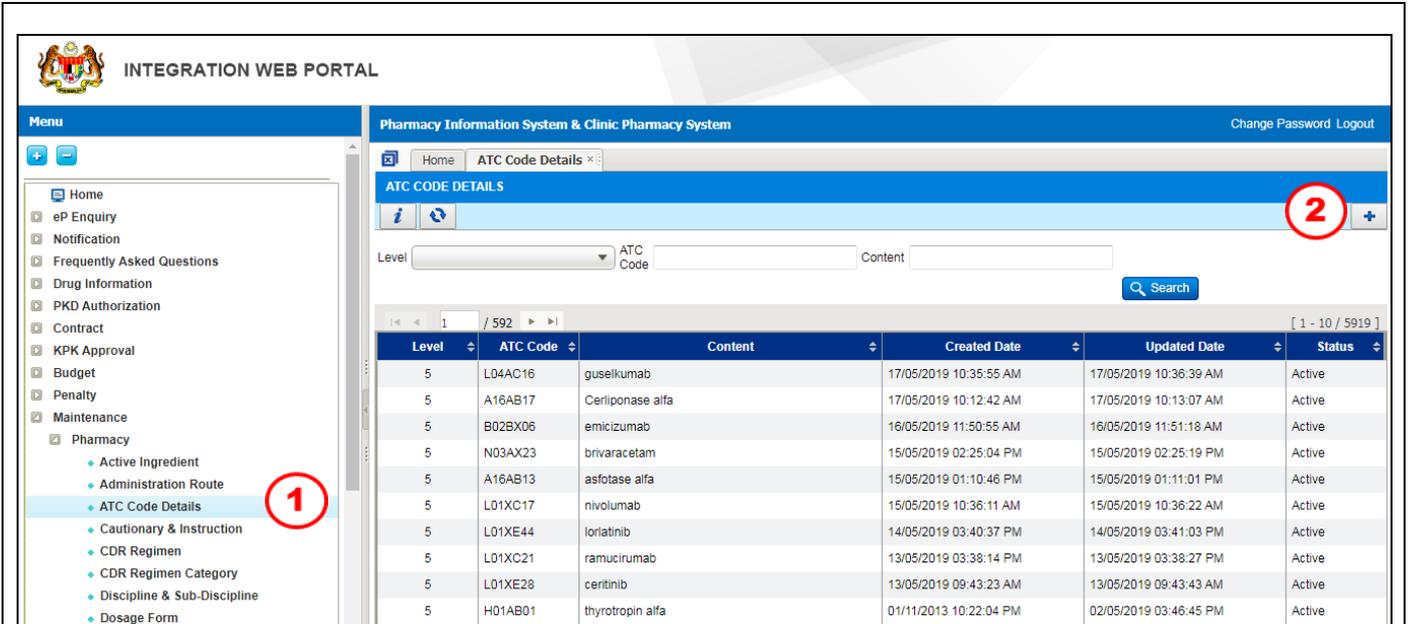
**Figure 3.4.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.5 ATC Code Details

#### 3.5.1 Create New ATC Code Details

To Create New ATC Code Details records, perform the steps below:



Level	ATC Code	Content	Created Date	Updated Date	Status
5	L04AC16	guselkumab	17/05/2019 10:35:55 AM	17/05/2019 10:36:39 AM	Active
5	A16AB17	Cerliponase alfa	17/05/2019 10:12:42 AM	17/05/2019 10:13:07 AM	Active
5	B02BX06	emicizumab	16/05/2019 11:50:55 AM	16/05/2019 11:51:18 AM	Active
5	N03AX23	brivaracetam	15/05/2019 02:25:04 PM	15/05/2019 02:25:19 PM	Active
5	A16AB13	asfotase alfa	15/05/2019 01:10:46 PM	15/05/2019 01:11:01 PM	Active
5	L01XC17	nivolumab	15/05/2019 10:36:11 AM	15/05/2019 10:36:22 AM	Active
5	L01XE44	lorlatinib	14/05/2019 03:40:37 PM	14/05/2019 03:41:03 PM	Active
5	L01XC21	ramucirumab	13/05/2019 03:38:14 PM	13/05/2019 03:38:27 PM	Active
5	L01XE28	ceritinib	13/05/2019 09:43:23 AM	13/05/2019 09:43:43 AM	Active
5	H01AB01	thyrotropin alfa	01/11/2013 10:22:04 PM	02/05/2019 03:46:45 PM	Active

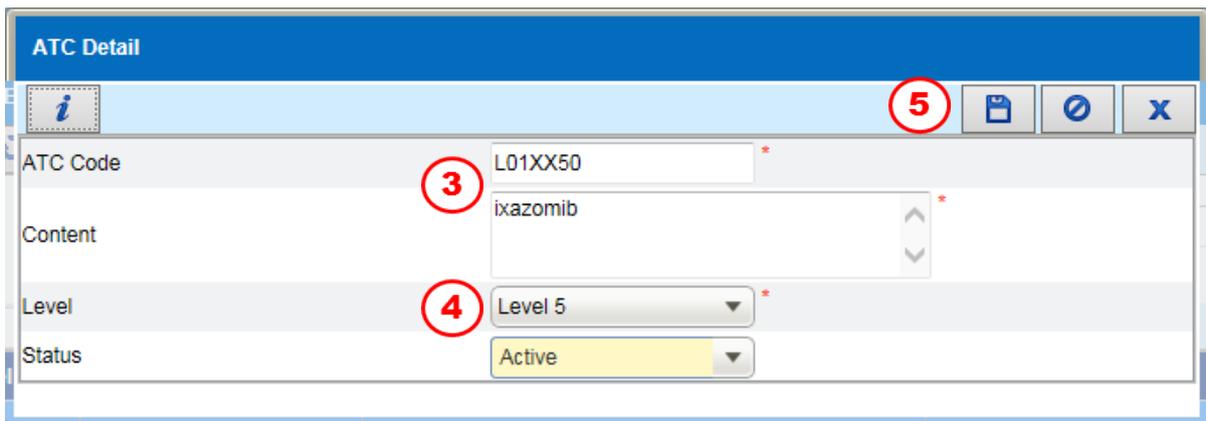
Figure 3.5.1-1 ATC Code Details Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on ATC Code Details sub menu.

#### STEP 2

Click on the  button to create a new record and ATC Detail screen will be displayed as Figure 3.5.1-2



ATC Code: L01XX50

Content: ixazomib

Level: Level 5

Status: Active

Figure 3.5.1-2 Add ATC Code Details

#### STEP 3

Enter **ATC Code** and **Content**

#### STEP 4

Select **Level** from drop down box:

- **Level 1**
- **Level 2**
- **Level 3**
- **Level 4**

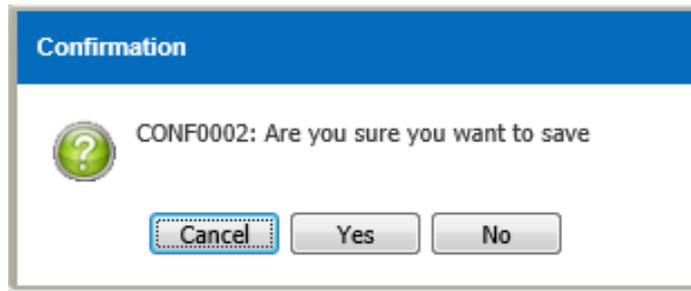
- **Level 5**

**STEP 5**

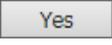
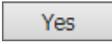
Click on the  button to save the record

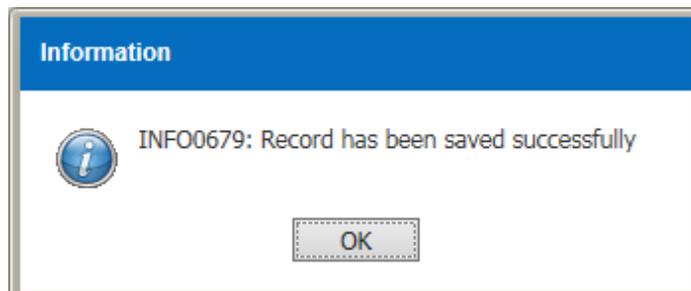
**Note**

- System will display a Confirmation Message as Figure 3.5.1-3

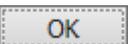


**Figure 3.5.1-3 Confirmation Message**

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.5.1-4

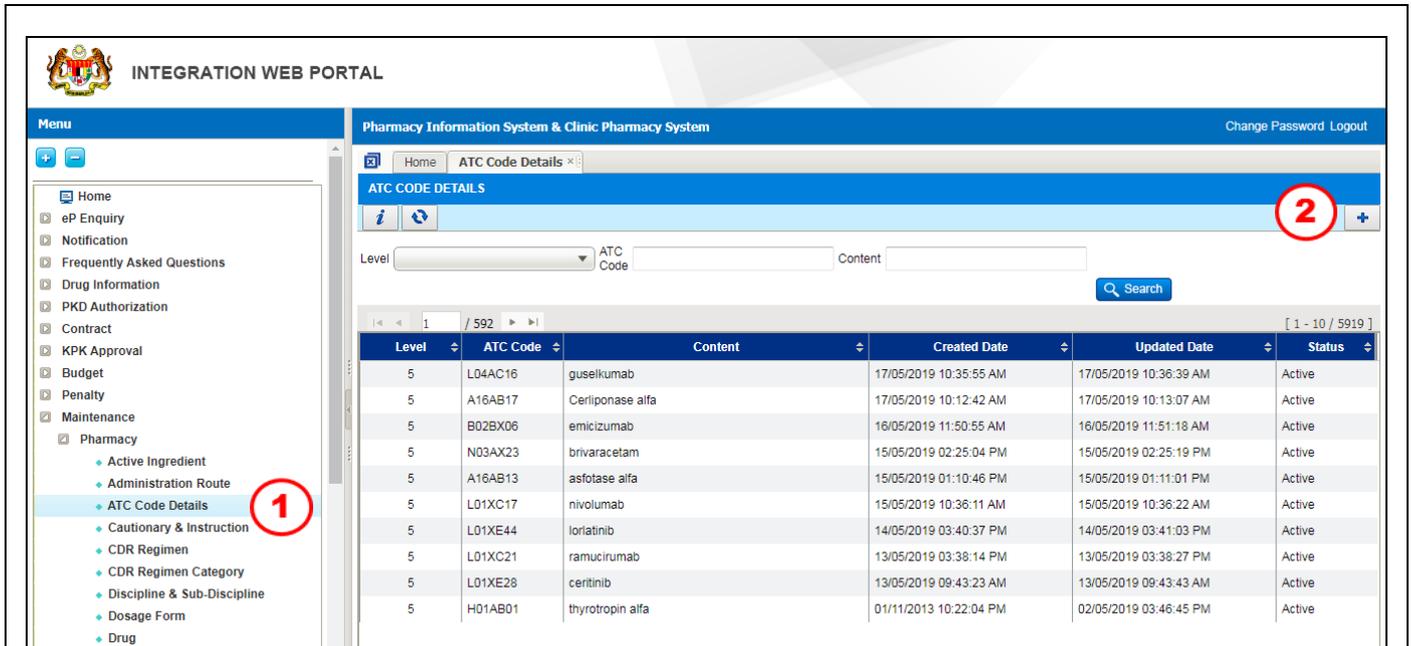


**Figure 3.5.1-4 Information Message**

Click on the  button to confirmed the record

### 3.5.2 Modify ATC Code Detail

To modify ATC Code Details records, perform the steps below:



**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home ATC Code Details

ATC CODE DETAILS

Level [dropdown] ATC Code [input] Content [input] [Search]

Level	ATC Code	Content	Created Date	Updated Date	Status
5	L04AC16	guselkumab	17/05/2019 10:35:55 AM	17/05/2019 10:36:39 AM	Active
5	A16AB17	Cerliponase alfa	17/05/2019 10:12:42 AM	17/05/2019 10:13:07 AM	Active
5	B02BX06	emicizumab	16/05/2019 11:50:55 AM	16/05/2019 11:51:18 AM	Active
5	N03AX23	brivaracetam	15/05/2019 02:25:04 PM	15/05/2019 02:25:19 PM	Active
5	A16AB13	asfotase alfa	15/05/2019 01:10:46 PM	15/05/2019 01:11:01 PM	Active
5	L01XC17	nivolumab	15/05/2019 10:36:11 AM	15/05/2019 10:36:22 AM	Active
5	L01XE44	lorlatinib	14/05/2019 03:40:37 PM	14/05/2019 03:41:03 PM	Active
5	L01XC21	ramucirumab	13/05/2019 03:38:14 PM	13/05/2019 03:38:27 PM	Active
5	L01XE28	ceritinib	13/05/2019 09:43:23 AM	13/05/2019 09:43:43 AM	Active
5	H01AB01	thyrotropin alfa	01/11/2013 10:22:04 PM	02/05/2019 03:46:45 PM	Active

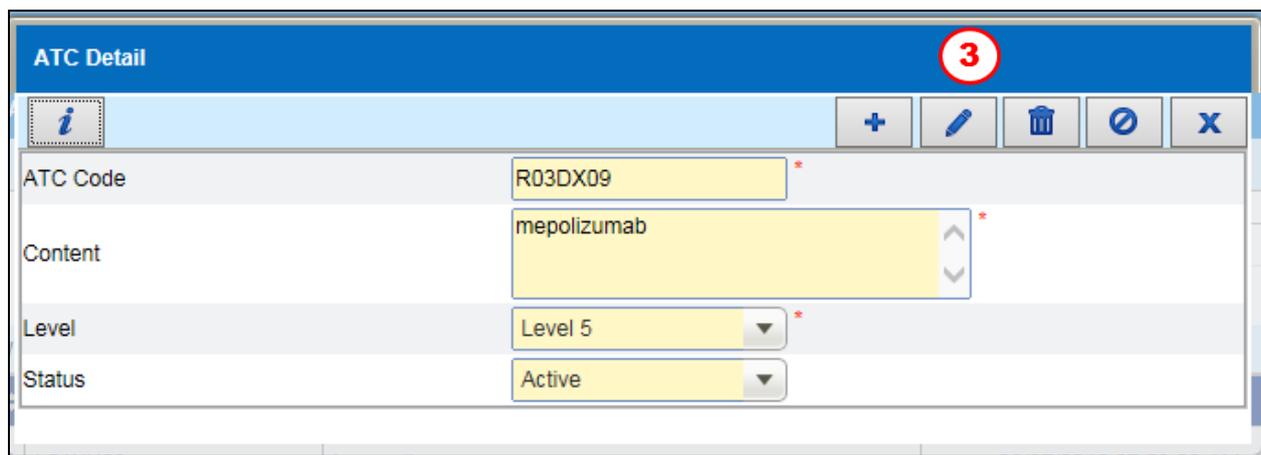
Figure 3.5.2-1 ATC Code Details Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on ATC Code Detail sub menu.

#### STEP 2

Click on the selected record



**ATC Detail**

ATC Code: R03DX09 \*

Content: mepolizumab \*

Level: Level 5 \*

Status: Active

Figure 3.5.2-2 Edit ATC Code Details

#### STEP 3

Click on the  button to edit the record

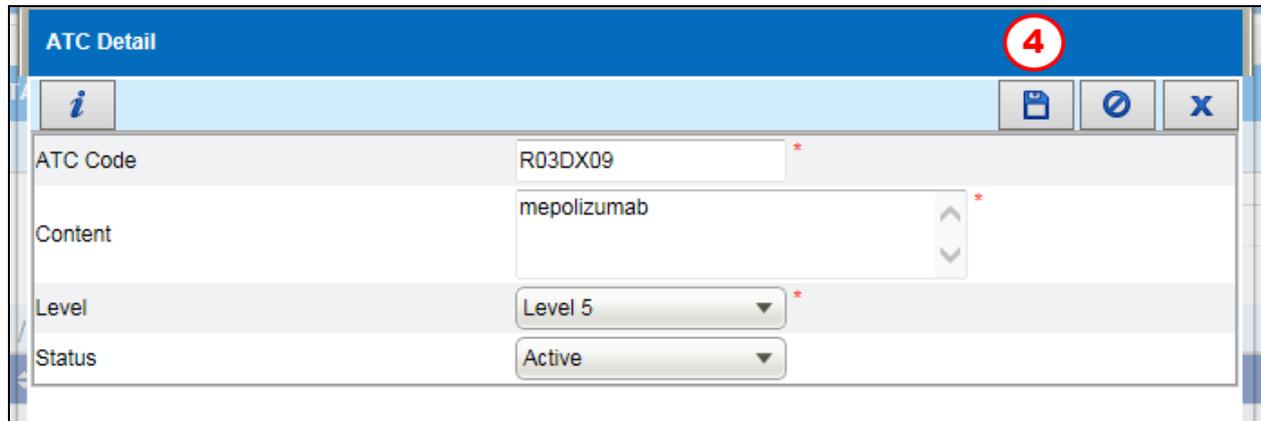


Figure 3.5.2-3 Edit ATC Code Details

**Note**

User is allowing to edit:

- **ATC Code**
- **Content**
- **Level**
- **Status**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.5.2-4

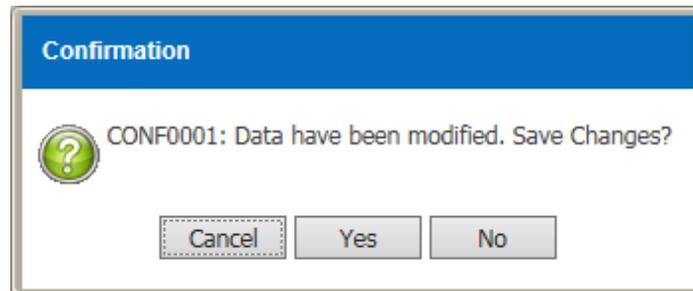
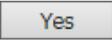
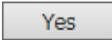


Figure 3.5.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.5.2-5

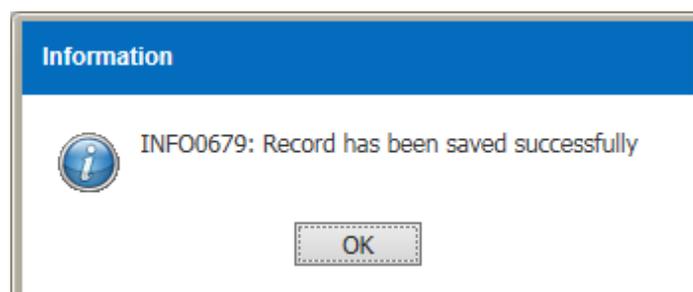


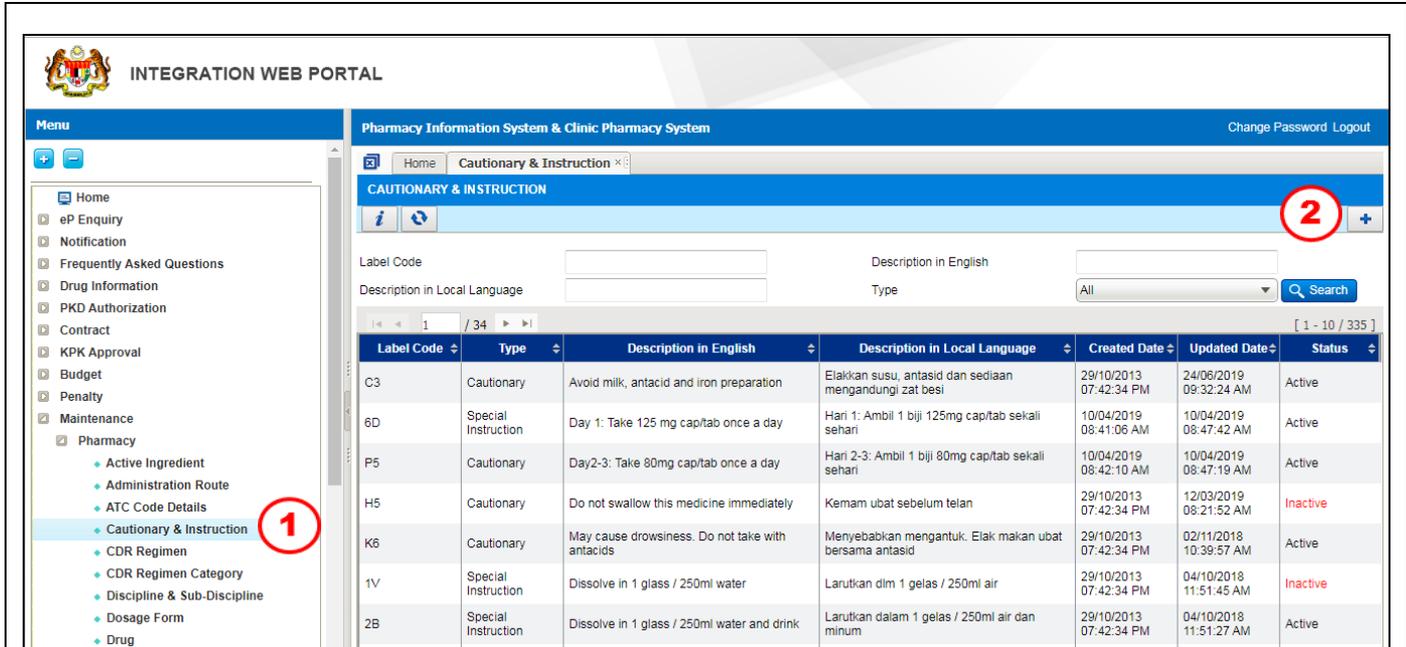
Figure 3.5.2-5 Information Message

- Click on the  button to confirmed the edited record

### 3.6 Cautionary and Instruction

#### 3.6.1 Create New Cautionary and Instruction

To Create New Cautionary and Instruction records, perform the steps below:



Label Code	Type	Description in English	Description in Local Language	Created Date	Updated Date	Status
C3	Cautionary	Avoid milk, antacid and iron preparation	Elakkan susu, antasid dan sediaan mengandungi zat besi	29/10/2013 07:42:34 PM	24/08/2019 09:32:24 AM	Active
6D	Special Instruction	Day 1: Take 125 mg cap/tab once a day	Hari 1: Ambil 1 biji 125mg cap/tab sekali sehari	10/04/2019 08:41:06 AM	10/04/2019 08:47:42 AM	Active
P5	Cautionary	Day2-3: Take 80mg cap/tab once a day	Hari 2-3: Ambil 1 biji 80mg cap/tab sekali sehari	10/04/2019 08:42:10 AM	10/04/2019 08:47:19 AM	Active
H5	Cautionary	Do not swallow this medicine immediately	Kemam ubat sebelum telan	29/10/2013 07:42:34 PM	12/03/2019 08:21:52 AM	Inactive
K6	Cautionary	May cause drowsiness. Do not take with antacids	Menyebabkan mengantuk. Elak makan ubat bersama antasid	29/10/2013 07:42:34 PM	02/11/2018 10:39:57 AM	Active
1V	Special Instruction	Dissolve in 1 glass / 250ml water	Larutkan dim 1 gelas / 250ml air	29/10/2013 07:42:34 PM	04/10/2018 11:51:45 AM	Inactive
2B	Special Instruction	Dissolve in 1 glass / 250ml water and drink	Larutkan dalam 1 gelas / 250ml air dan minum	29/10/2013 07:42:34 PM	04/10/2018 11:51:27 AM	Active

Figure 3.6.1-1 Cautionary And Instruction Listing Page

#### STEP 1

Go to Maintenance menu and click on Pharmacy and Cautionary & Instruction sub menu.

#### STEP 2

Click on the  button to create a new record and Cautionary And Instruction screen will be displayed as Figure 3.6.1-1

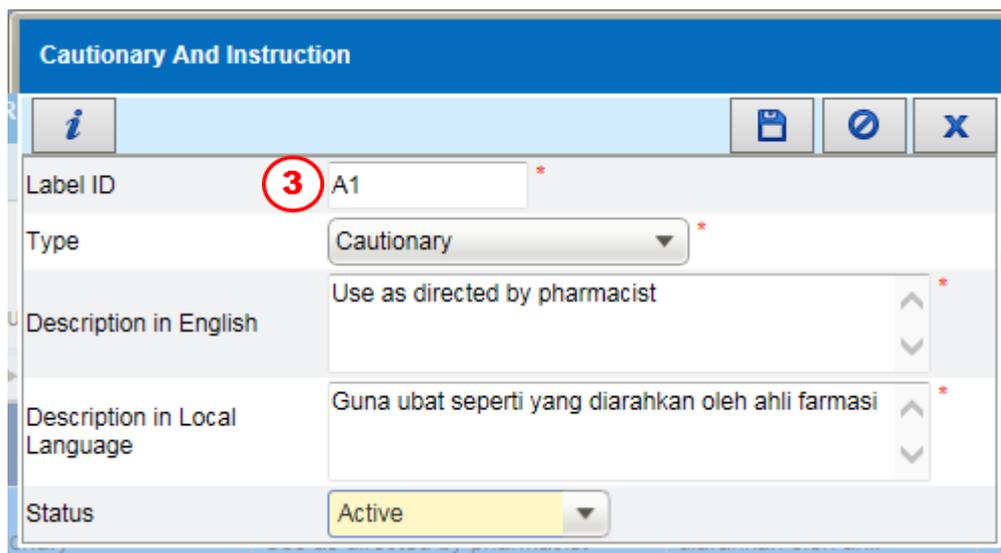


Figure 3.6.1-2 Add Cautionary And Instruction

#### STEP 3

Enter **Label ID**

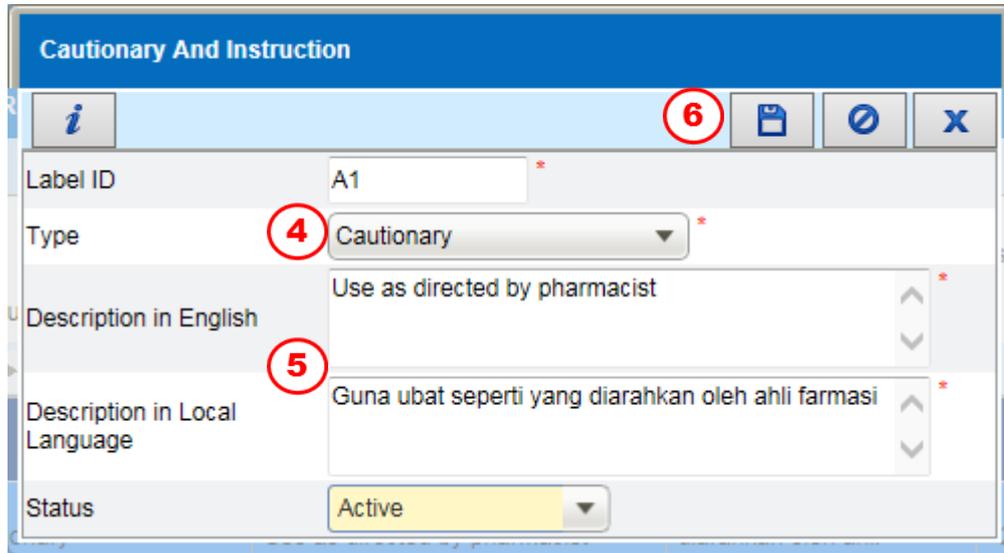


Figure 3.6.1-3 Add Cautionary And Instruction

**STEP 4**

Select **Type** from drop down box:

- **Administrative Instruction**
- **Cautionary**
- **Special Instruction**

**STEP 5**

Enter **Description in English** and **Description in Local Language**

**STEP 6**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.6.1-4

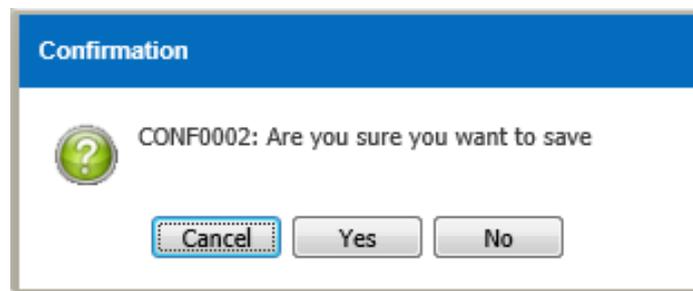
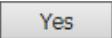
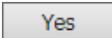
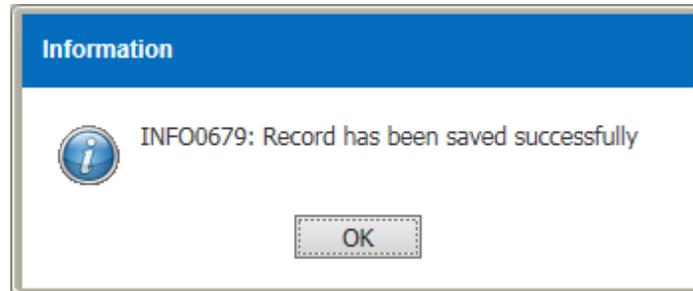


Figure 3.6.1-4 Confirmation Message

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.6.1-5



**Figure 3.6.1-5 Information Message**

- Click on the  button to confirmed the record

### 3.6.2 Modify Cautionary and Instruction

To modify Cautionary and Instruction records, perform the step below:

INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Cautionary & Instruction

CAUTIONARY & INSTRUCTION

Label Code: [ ] Description in English: [ ] Type: [ All ] Search

Description in Local Language: [ ]

Label Code	Type	Description in English	Description in Local Language	Created Date	Updated Date	Status
C3	Cautionary	Avoid milk, antacid and iron preparation	Elakkan susu, antasid dan sediaan mengandungi zat besi	29/10/2013 07:42:34 PM	24/06/2019 09:32:24 AM	Active
6D	Special Instruction	Day 1: Take 125 mg cap/tab once a day	Hari 1: Ambil 1 biji 125mg cap/tab sekali sehari	10/04/2019 08:41:06 AM	10/04/2019 08:47:42 AM	Active
P5	Cautionary	Day2-3: Take 80mg cap/tab once a day	Hari 2-3: Ambil 1 biji 80mg cap/tab sekali sehari	10/04/2019 08:42:10 AM	10/04/2019 08:47:19 AM	Active
H5	Cautionary	Do not swallow this medicine immediately	Kemam ubat sebelum telan	29/10/2013 07:42:34 PM	12/03/2019 08:21:52 AM	Inactive
K6	Cautionary	May cause drowsiness. Do not take with antacids	Menyebabkan mengantuk. Elak makan ubat bersama antasid	29/10/2013 07:42:34 PM	02/11/2018 10:39:57 AM	Active
1V	Special Instruction	Dissolve in 1 glass / 250ml water	Larutkan dim 1 gelas / 250ml air	29/10/2013 07:42:34 PM	04/10/2018 11:51:45 AM	Inactive
2B	Special Instruction	Dissolve in 1 glass / 250ml water and drink	Larutkan dalam 1 gelas / 250ml air dan minum	29/10/2013 07:42:34 PM	04/10/2018 11:51:27 AM	Active

Figure 3.6.2-1 Cautionary And Instruction Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Cautionary and Instruction sub menu.

#### STEP 2

Click on the selected record

Cautionary And Instruction

Label ID: 1L \*

Type: Special Instruction \*

Description in English: Leave for 10 minutes. Then rinse thoroughly \*

Description in Local Language: Biarkan selama 10 minit. Kemudian bilas bersih \*

Status: Active

Figure 3.6.2-2 Add Cautionary And Instruction

#### STEP 3

Click on the button to edit the record

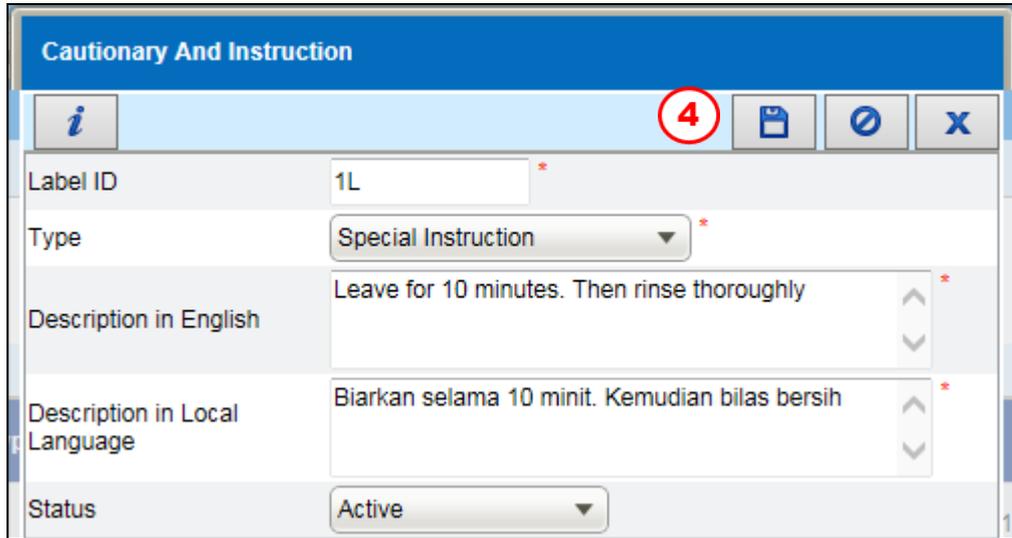


Figure 3.6.2-3 Add Cautionary And Instruction

**Note**

User is allowing to edit:

- **Label ID**
- **Type**
- **Description in English and Description in Local Language**
- **Status**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.6.2-4

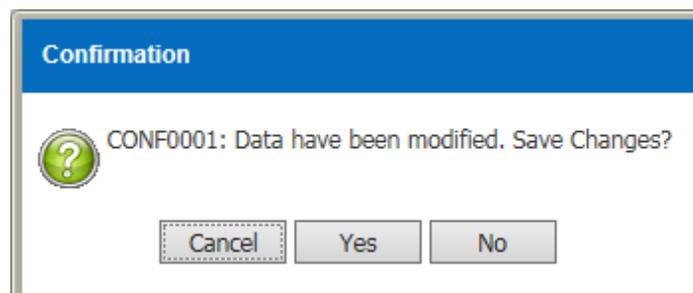
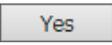
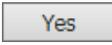
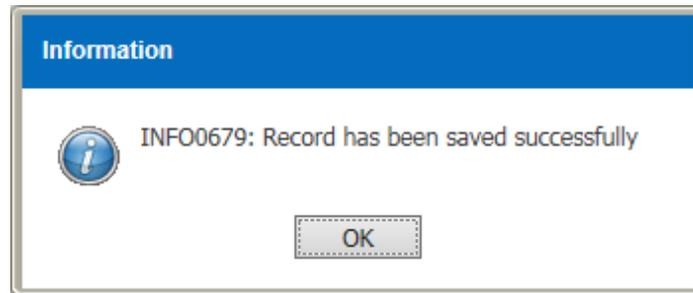


Figure 3.6.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.6.2-5



**Figure 3.6.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.7 Indication

#### 3.7.1 Create New Indication

To Create New Indication records, perform the steps below:

Indication Code	Indication Description	Description In English	Description in Local Language	Created Date	Updated Date	Status
R03C	Obstructive Airway Diseases, Systemic	Obstructive Airway Diseases	-	30/10/2013 10:15:19 AM	13/06/2019 04:08:32 PM	Active
R03A	Obstructive Airway Diseases, Inhalants	Obstructive Airway Diseases	Masalah Paru-paru	30/10/2013 10:15:19 AM	13/06/2019 04:08:17 PM	Active
L04_8	Systemic lupus erythematosus (SLE)	SLE	SLE	29/05/2019 12:21:59 PM	29/05/2019 12:22:43 PM	Active
IND0417	Others/ Off-label	-	-	22/07/2014 08:11:12 AM	20/02/2019 03:42:20 PM	Active
S02D	Not selected/ Not defined	-	-	30/10/2013 10:15:19 AM	20/02/2019 03:42:08 PM	Active
S02_5	Impacted wax softener	-	-	20/02/2019 03:05:41 PM	20/02/2019 03:06:02 PM	Active
M04_2	Hyperuricemia	Reduce uric acid	Kurangkan asid urik	04/01/2019 11:07:59 AM	04/01/2019 11:08:41 AM	Active
L01_16	Tumour Lysis Syndrome	-	-	04/01/2019 11:07:23 AM	04/01/2019 11:07:55 AM	Active

Figure 3.7.1-1 Indication Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Indication sub menu.

#### STEP 2

Click on the  button to create a new record and Indication screen will be displayed as Figure 3.7.1-2

Figure 3.7.1-2 Indication

#### STEP 3

Enter **Indication Code**, **Indication Description**, **Description in English** and **Indication Local Description**

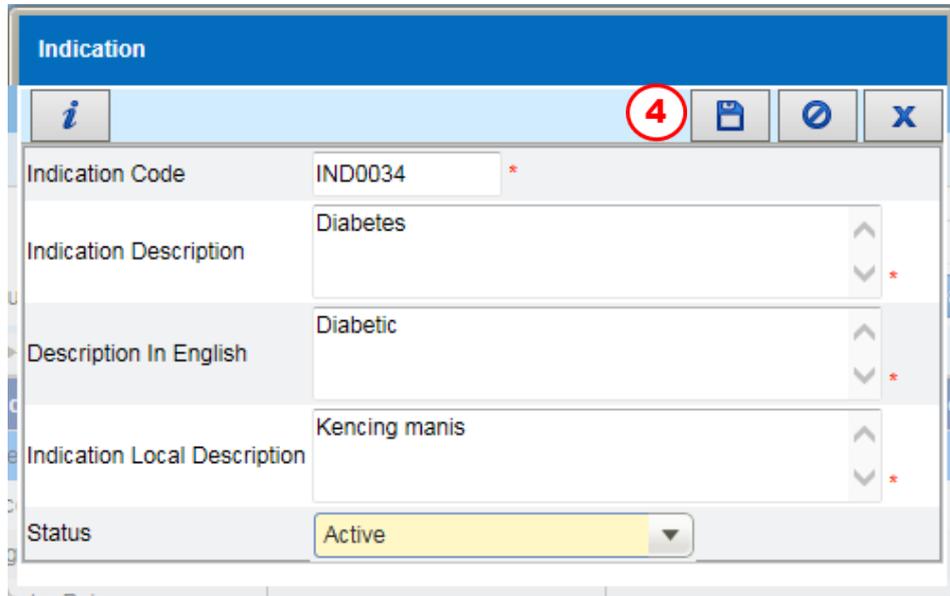


Figure 3.7.1-3 Indication

**STEP 4**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.7.1-4

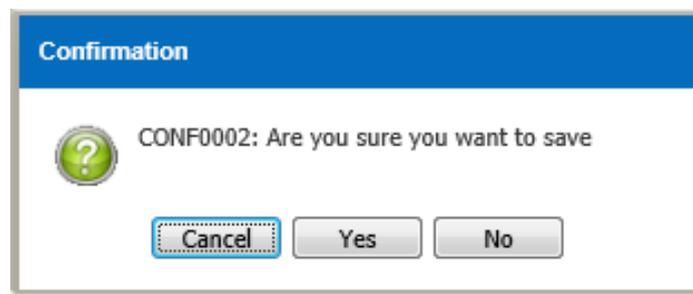
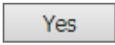
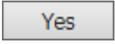


Figure 3.7.1-4 Confirmation Message

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.7.1-5

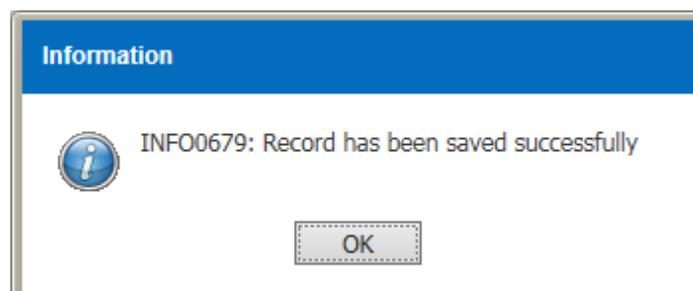
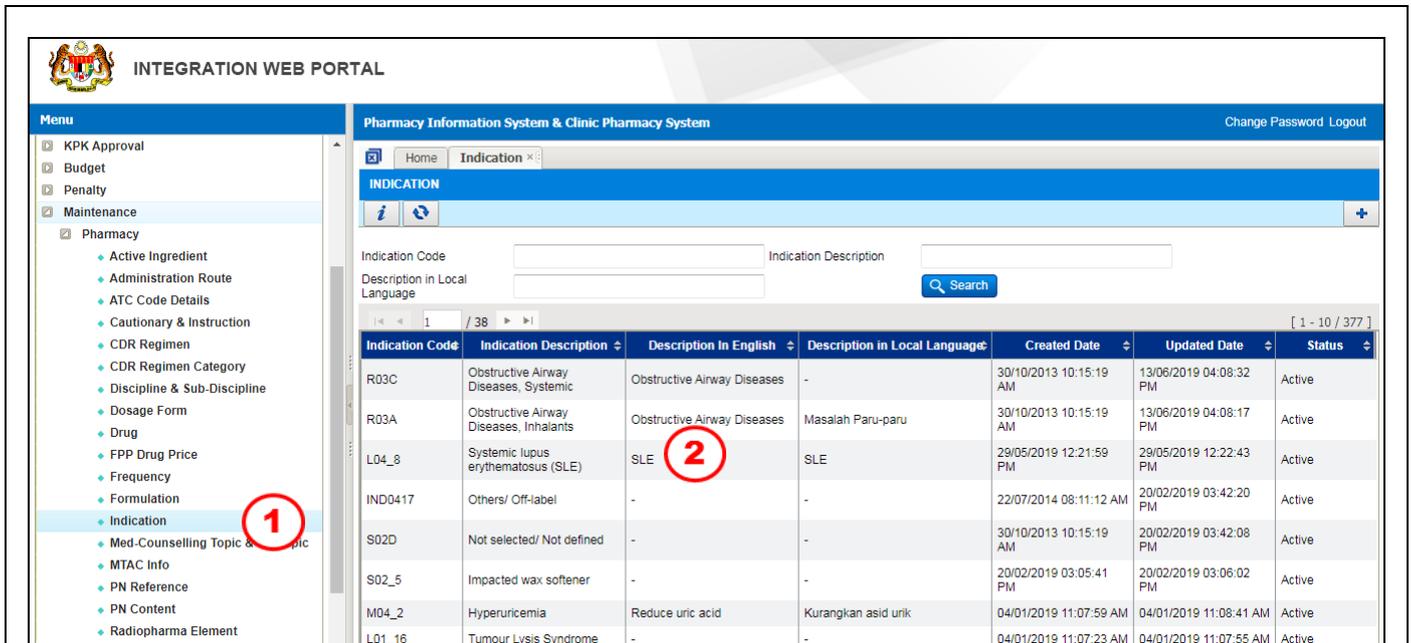


Figure 3.7.1-5 Information Message

- Click on the  button to confirmed the record

### 3.7.2 Modify Indication

To modify Indication records, perform the steps below:



Indication Code	Indication Description	Description In English	Description in Local Language	Created Date	Updated Date	Status
R03C	Obstructive Airway Diseases, Systemic	Obstructive Airway Diseases	-	30/10/2013 10:15:19 AM	13/06/2019 04:08:32 PM	Active
R03A	Obstructive Airway Diseases, Inhalants	Obstructive Airway Diseases	Masalah Paru-paru	30/10/2013 10:15:19 AM	13/06/2019 04:08:17 PM	Active
L04_8	Systemic lupus erythematosus (SLE)	SLE	SLE	29/05/2019 12:21:59 PM	29/05/2019 12:22:43 PM	Active
IND0417	Others/ Off-label	-	-	22/07/2014 08:11:12 AM	20/02/2019 03:42:20 PM	Active
S02D	Not selected/ Not defined	-	-	30/10/2013 10:15:19 AM	20/02/2019 03:42:08 PM	Active
S02_5	Impacted wax softener	-	-	20/02/2019 03:05:41 PM	20/02/2019 03:06:02 PM	Active
M04_2	Hyperuricemia	Reduce uric acid	Kurangkan asid urik	04/01/2019 11:07:59 AM	04/01/2019 11:08:41 AM	Active
L01_16	Tumour Lysis Syndrome	-	-	04/01/2019 11:07:23 AM	04/01/2019 11:07:55 AM	Active

Figure 3.7.2-1 Indication Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on Indication sub menu.

#### STEP 2

Click on the selected record

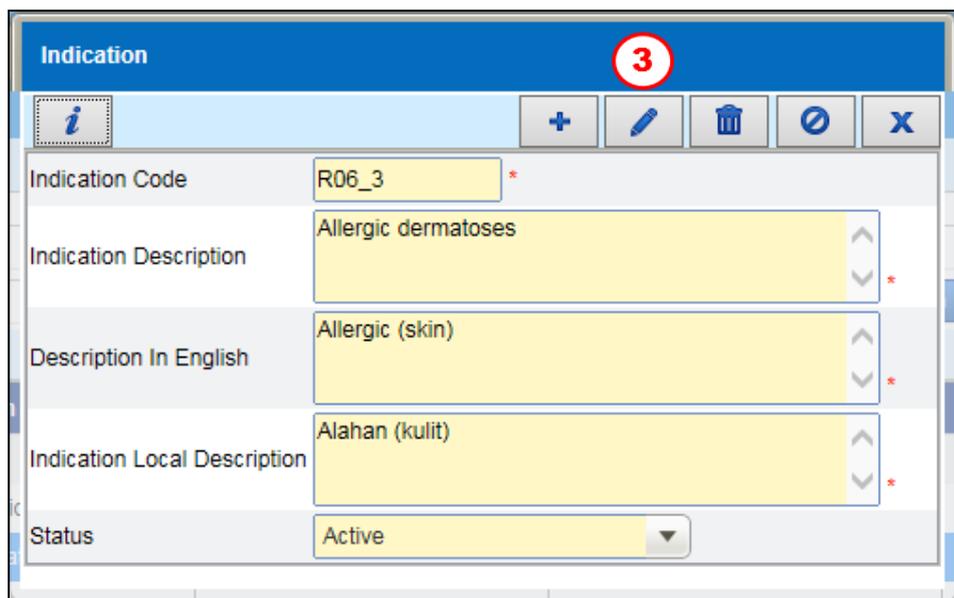


Figure 3.7.2-2 Edit Indication Listing Page

#### STEP 3

Click on the  button to edit the record

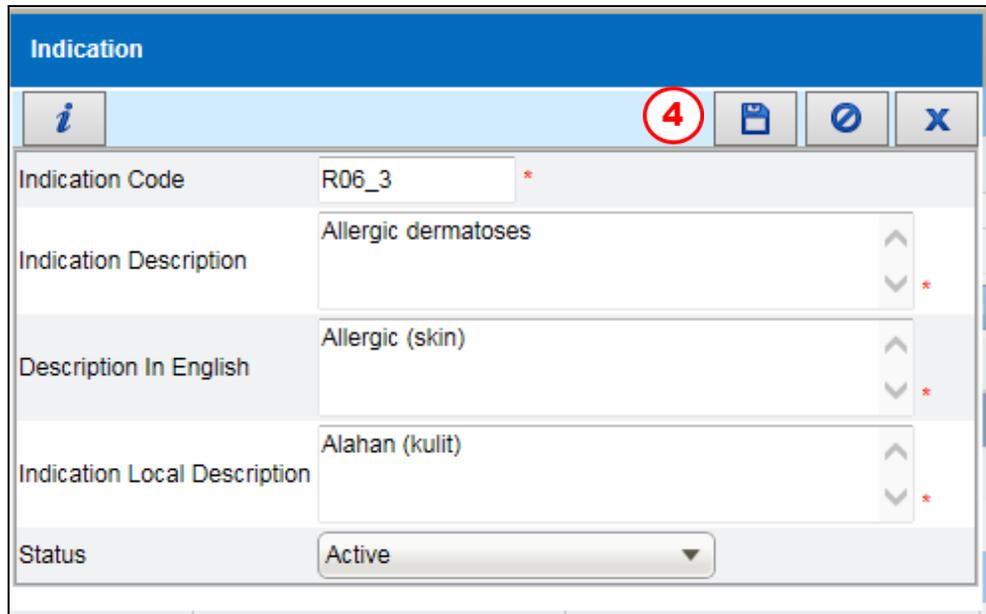


Figure 3.7.2-3 Edit Indication Listing Page

**Note**

User is allowing to edit:

- **Indication Code**
- **Indication Description**
- **Description in English**
- **Indication Local Description**
- **Status**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.7.2-4

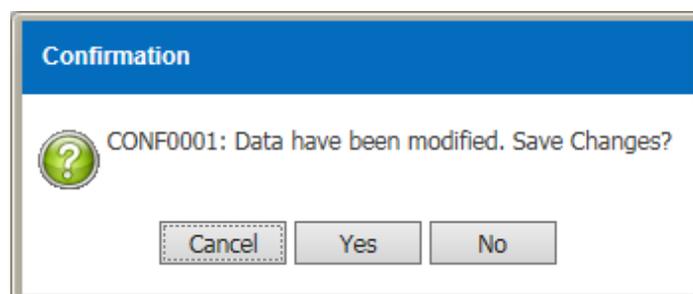
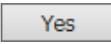
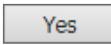
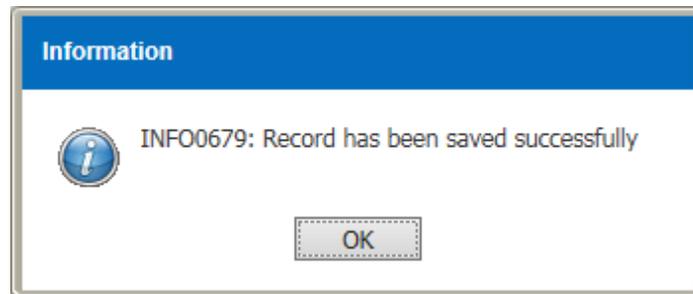


Figure 3.7.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.7.2-5



**Figure 3.7.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.8 Drug

To create and modify Drug records, perform the steps below:

**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Drug ×

**DRUG** 3 +

Drug Code:  Drug Name:   
 Active Ingredient:  Drug Category:   
 Dosage Form:  Item Sub Class:

Drug Code	Drug Name	Active Ingredient	Drug Category	Created Date	Updated Date	Status
B01AD01000P4001XX	Streptokinase 1,500,000 IU Injection	Streptokinase	A*	02/11/2013 03:11:13 PM	04/07/2019 10:21:01 AM	Active
G02CB01196T1003XX	Bromocriptine Mesilate 10mg Tablet	Bromocriptine	A/KK	02/11/2013 03:11:13 PM	04/07/2019 10:20:16 AM	Active
G02CB01196T1002XX	Bromocriptine Mesilate 5mg Tablet	Bromocriptine	A/KK	02/11/2013 03:11:13 PM	04/07/2019 10:19:58 AM	Active
G02CB01196T1001XX	Bromocriptine Mesilate 2.5mg Tablet	Bromocriptine	A/KK	02/11/2013 03:11:13 PM	04/07/2019 10:19:39 AM	Active
L04AC05000P3001	Ustekinumab 90mg/ml Injection (Prefilled Syringe)	Ustekinumab	A*	03/07/2019 11:09:13 AM	03/07/2019 11:15:51 AM	Active
GLN0200084	Chlorhexidine 1 in 1000 (0.1%) in Aqueous/Water	Chlorhexidine	C	22/06/2015 03:34:18 PM	28/06/2019 03:56:29 PM	Active

Figure 3.8-1 Drug Listing Page

#### STEP 1

Go to “Maintenance” menu and click on pharmacy

#### STEP 2

Click on “Drug Master”

#### STEP 3

Click on the  button to Create New Drug Master

**DRUG MASTER**

Drug Code:  4 Formulary:  Strength value:   
 Drug Category:  5 Drug Type:  Quantity value:  8  
 Drug Schedule:  6 Dosage Form:  SKU:  9  
 Active Ingredient:  6 Item Sub Class:  Conversion Factor:  0  
 Drug Name:  7 Drug Label:  Trade Name:   
 Status:  Active Vote Object:  Defined Daily Dose:  UOM:   
 Value To Be Displayed:  Strength  Quantity  None\* Authorization Category:  Drug Price:  0.0000  
 Description in English:  Description in Local Language:   
 Administrative Instruction:  10  
 Special Instruction:   
 Cautionary:

Split Dose Applicable  Taper Applicable  Opioid Substitution Treatment (OST)  
 NEDL Flag  Fractional Dosage Applicable  Fractional Dosage Round Up  Full Paying Patient Drug  
 AUC Calculator Applicable  TDM  Compounded Item  
 Special Approved Drug  Allow Duplicate Order  Allow Combination Drug

Figure 3.8-2 Drug

**STEP 4**

Insert Drug Code

**STEP 5**

Choose drug category

**STEP 6**

Select Active Ingredient

**STEP 7**

Insert Drug Name

**STEP 8**

Insert Quantity value and select drug form

**STEP 9**

Insert SKU and select drug form

**STEP 10**

Select Administration Instruction, Special Instruction and Cautionary if need to fill up for particular drug  
Tick check box if there is any indication for that particular drug



Figure 3.8-3 Drug Route

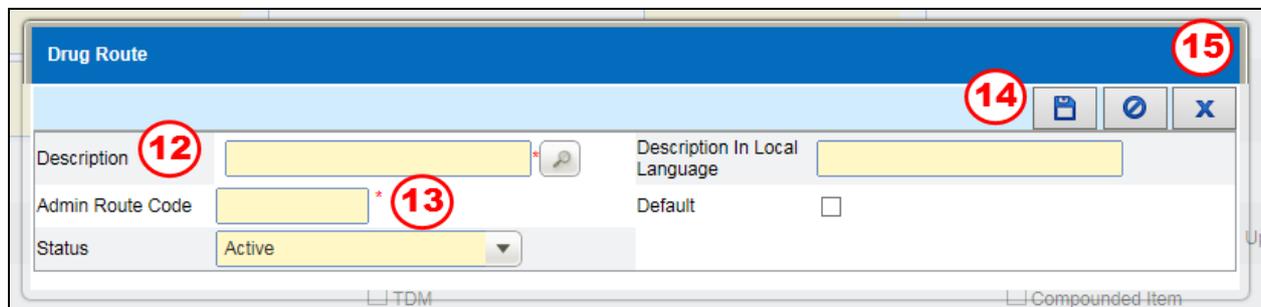
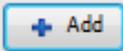


Figure 3.8-4 Drug Route

**STEP 11**

Click on the  button to Add Route for drug

**STEP 12**

Select Description

**STEP 13**

Insert Code

**STEP 14**

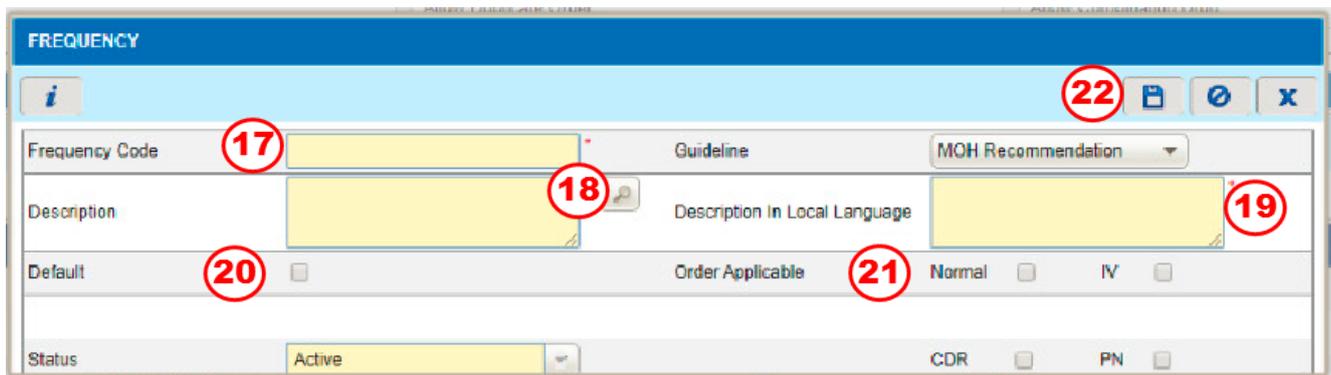
Click on the  button to save the Drug Route record

**STEP 15**

Click on the  button to close record

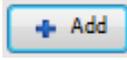


**Figure 3.8-5 Drug Frequency**



**Figure 3.8-6 Drug Frequency**

**STEP 16**

Click on the  button to Add Frequency for drug

**STEP 17**

Insert Frequency Code

**STEP 18**

Select Description

**STEP 19**

Insert Description In Local Language

**STEP 20**

Set default by click the  checkbox

**STEP 21**

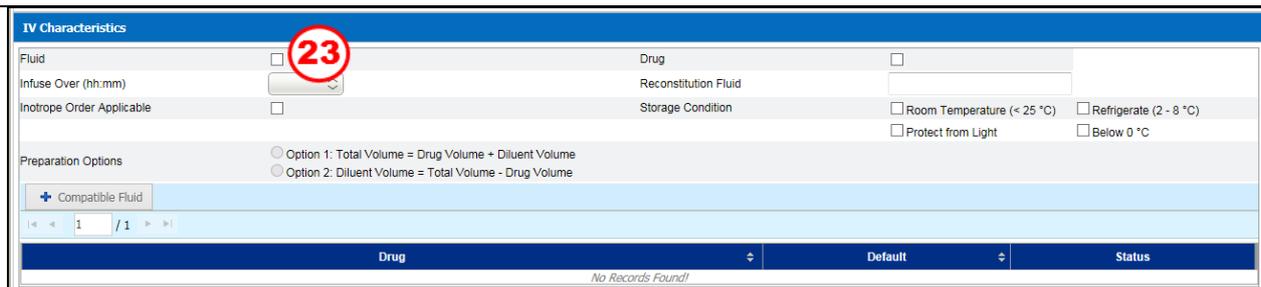
Set order Applicable by click the  checkbox

**STEP 22**

Click on the  button to save the Frequency record

**Note**

Click on the  button to close record



**IV Characteristics**

Fluid  **23** Drug

Infuse Over (hh:mm)  Reconstitution Fluid

Inotrope Order Applicable  Storage Condition  Room Temperature (< 25 °C)  Refrigerate (2 - 8 °C)

Protect from Light  Below 0 °C

Preparation Options

Option 1: Total Volume = Drug Volume + Diluent Volume

Option 2: Diluent Volume = Total Volume - Drug Volume

+ Compatible Fluid

<< 1 / 1 >>

Drug Default Status

*No Records Found!*

Figure 3.8-7 Drug IV

**STEP 23**

Select any field in the IV Characteristics if drug from IV group



**Extemp Preparation**

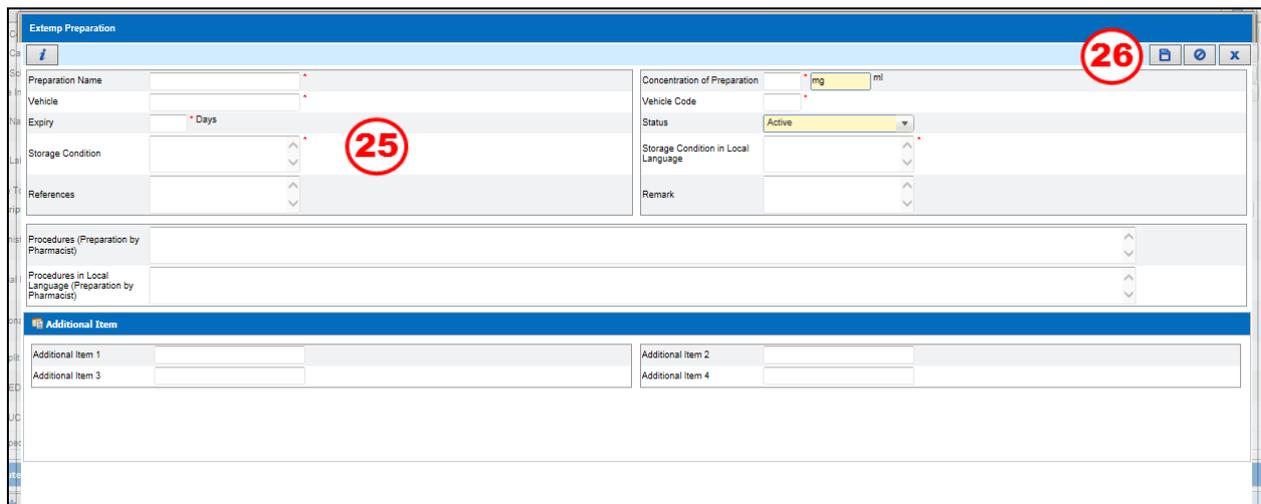
+ Add **24**

<< 1 / 1 >>

Default Preparation Name Vehicle Storage Expiry (Days) Remark Status

*No Records Found!*

Figure 3.8-8 Drug Extemp



**Extemp Preparation** **26**

Preparation Name

Vehicle

Expiry  Days

Storage Condition  **25**

References

Concentration of Preparation  mg ml

Vehicle Code

Status  Active

Storage Condition in Local Language

Remark

Procedures (Preparation by Pharmacist)

Procedures in Local Language (Preparation by Pharmacist)

**Additional Item**

Additional Item 1

Additional Item 2

Additional Item 3

Additional Item 4

Figure 3.8-9 Drug Extemp Preparation

**STEP 24**

Click  if drug is extemp drug

**STEP 25**

Fill all the mandatory field

**STEP 26**

Click on the  button to save the record



Figure 3.8-10 Drug Indication

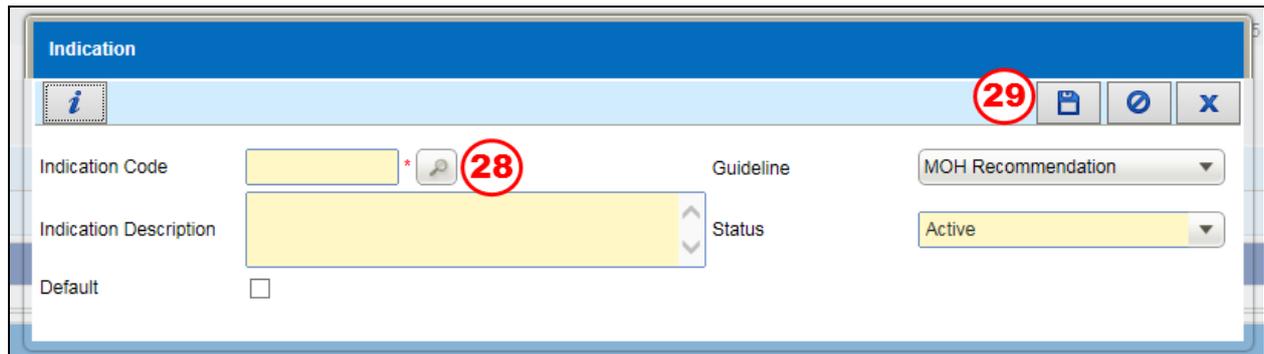


Figure 3.8-11 Drug Indication

**STEP 27**

Click  to insert drug indication

**STEP 28**

Fill all the mandatory field

**STEP 29**

Click on the  button to save the record

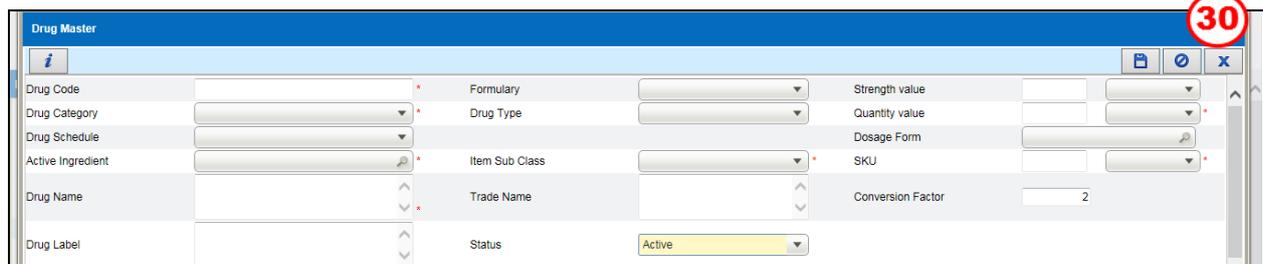


Figure 3.8-12 Drug Master

**STEP 30**

Click on the  button to save the Drug Master record

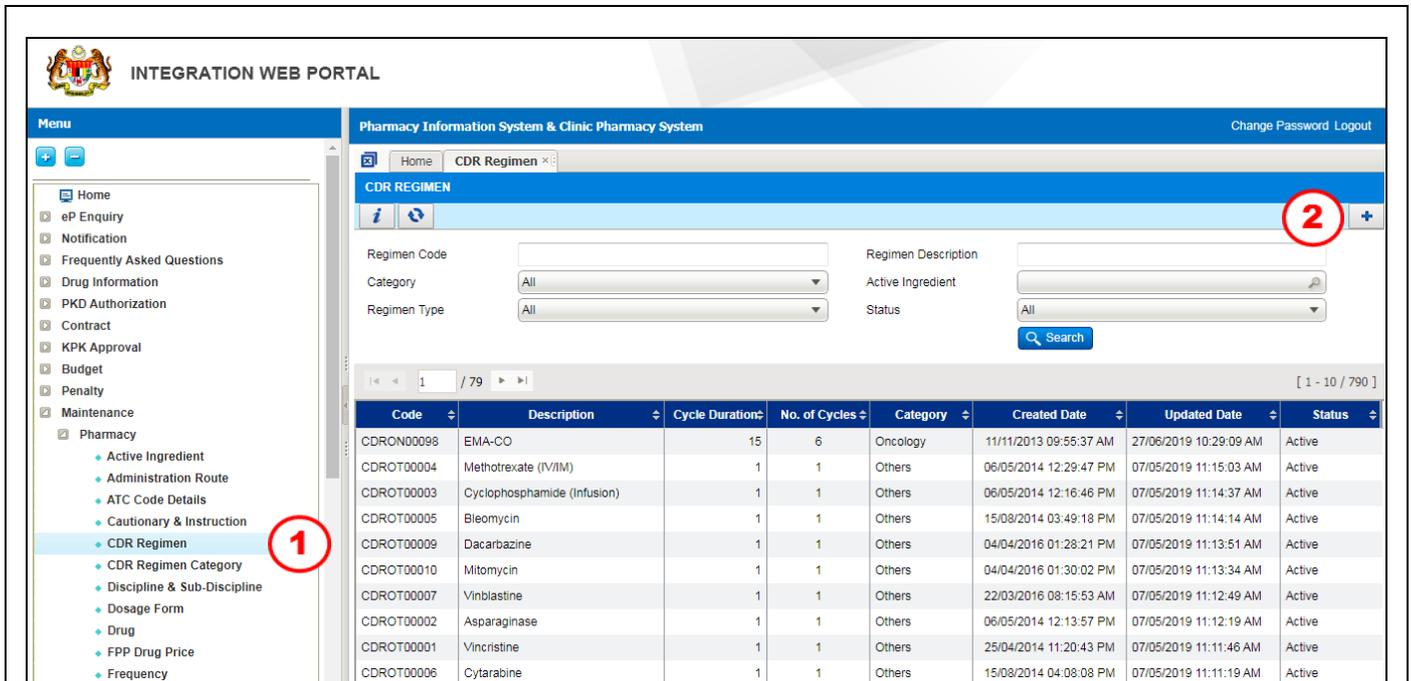
**Note**

- Click on the  button to close record
- Field with \* is mandatory field

### 3.9 CDR Regimen

#### 3.9.1 Create New CDR Regimen

To Create New CDR Regimen records, perform the steps below:



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home CDR Regimen ×

CDR REGIMEN

Regimen Code:

Regimen Description:

Category:

Active Ingredient:

Regimen Type:

Status:

1 / 79 [ 1 - 10 / 790 ]

Code	Description	Cycle Duration	No. of Cycles	Category	Created Date	Updated Date	Status
CDRON00099	EMA-CO	15	6	Oncology	11/11/2013 09:55:37 AM	27/06/2019 10:29:09 AM	Active
CDROT00004	Methotrexate (IV/IM)	1	1	Others	06/05/2014 12:29:47 PM	07/05/2019 11:15:03 AM	Active
CDROT00003	Cyclophosphamide (Infusion)	1	1	Others	06/05/2014 12:16:46 PM	07/05/2019 11:14:37 AM	Active
CDROT00005	Bleomycin	1	1	Others	15/08/2014 03:49:18 PM	07/05/2019 11:14:14 AM	Active
CDROT00009	Dacarbazine	1	1	Others	04/04/2016 01:28:21 PM	07/05/2019 11:13:51 AM	Active
CDROT00010	Mitomycin	1	1	Others	04/04/2016 01:30:02 PM	07/05/2019 11:13:34 AM	Active
CDROT00007	Vinblastine	1	1	Others	22/03/2016 08:15:53 AM	07/05/2019 11:12:49 AM	Active
CDROT00002	Asparaginase	1	1	Others	06/05/2014 12:13:57 PM	07/05/2019 11:12:19 AM	Active
CDROT00001	Vincristine	1	1	Others	25/04/2014 11:20:43 PM	07/05/2019 11:11:46 AM	Active
CDROT00006	Cytarabine	1	1	Others	15/08/2014 04:08:08 PM	07/05/2019 11:11:19 AM	Active

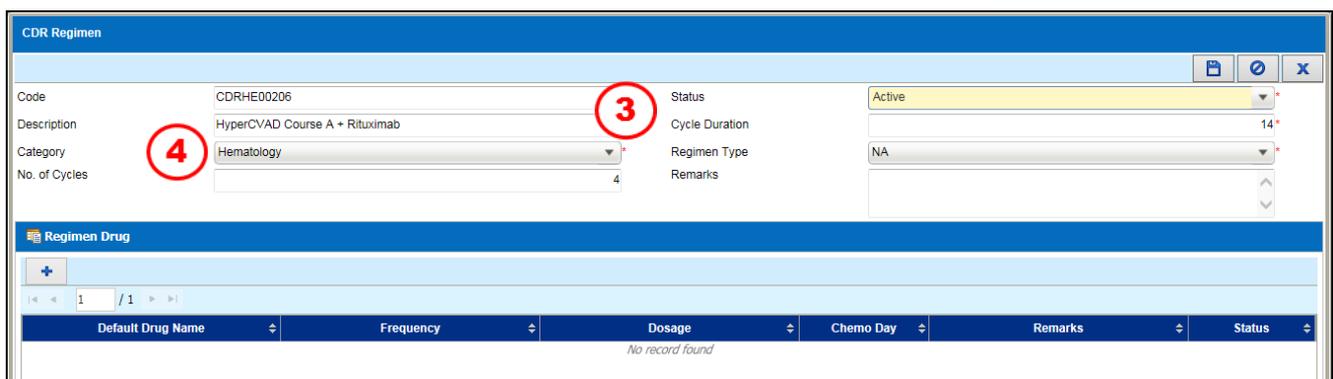
Figure 3.9.1-1 CDR Regimen Listing Page

#### STEP 1

Click on the Pharmacy menu followed by click on the CDR Regimen menu

#### STEP 2

Click on the  button to add new record and CDR Regimen screen will be displayed as Figure 3.9.1-2



CDR Regimen

Code: CDRHE00206

Description: HyperCVAD Course A + Rituximab

Category: Hematology

No. of Cycles: 4

Status: Active

Cycle Duration: 14

Regimen Type: NA

Remarks:

Regimen Drug

Default Drug Name	Frequency	Dosage	Chemo Day	Remarks	Status
No record found					

Figure 3.9.1-2 CDR Regimen Master

#### STEP 3

Enter **Code** and **Description**

#### STEP 4

Select **Category** from drop down box:

- Hematology
- Oncology

- Others
- Paediatric

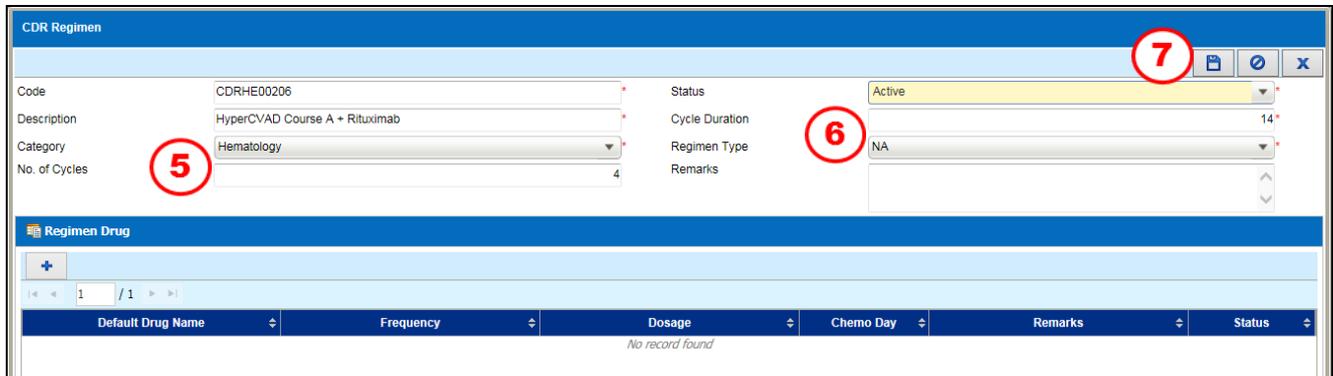


Figure 3.9.1-3 CDR Regimen Master

**STEP 5**

Enter **No. of Cycles**

**STEP 6**

Enter **Cycle Duration** and **Regimen Type**

**Note**

**Regimen Type** will display information based on selected **Category**

**STEP 7**

Click on the  button to save the data

**Note**

- Confirmation message as shown in Figure 3.9.1-4 will be displayed after user save the record

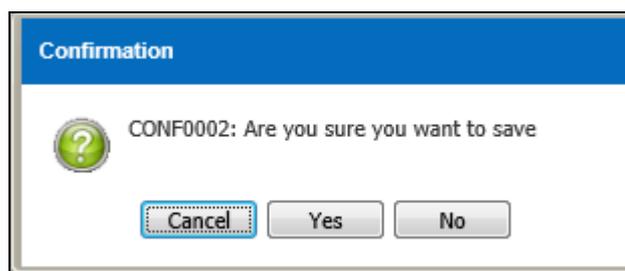


Figure 3.9.1-4 Confirmation Message

- Record will save when user click on the  button as shown in Figure 3.9.1-5

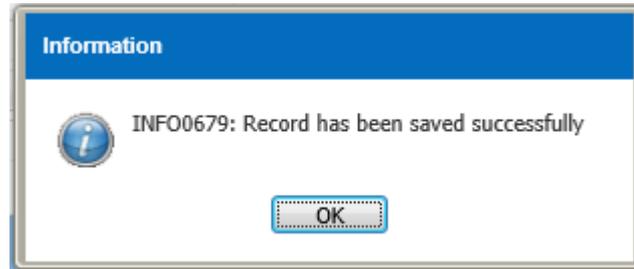


Figure 3.9.1-5 Confirmation Message

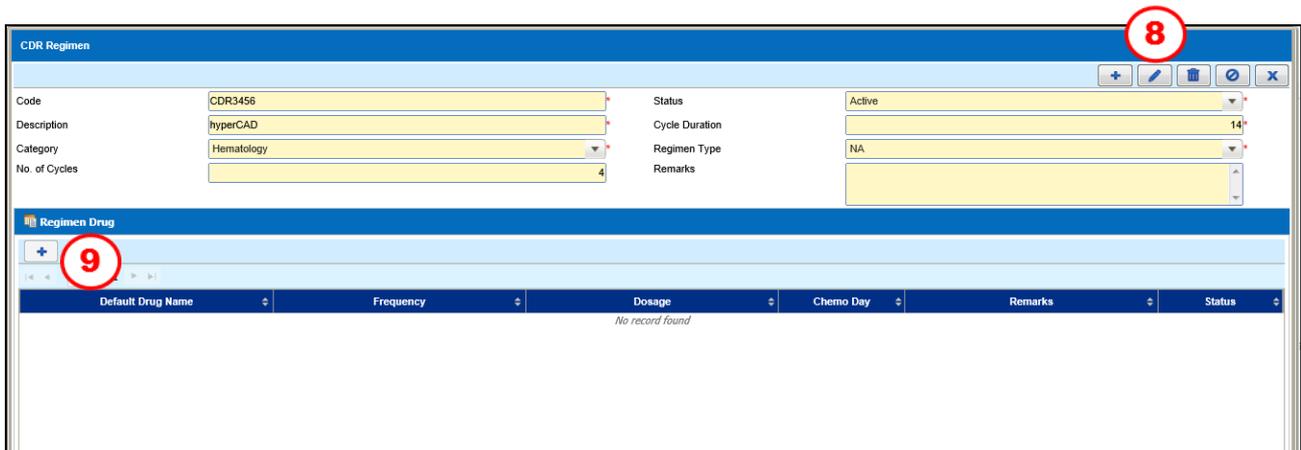


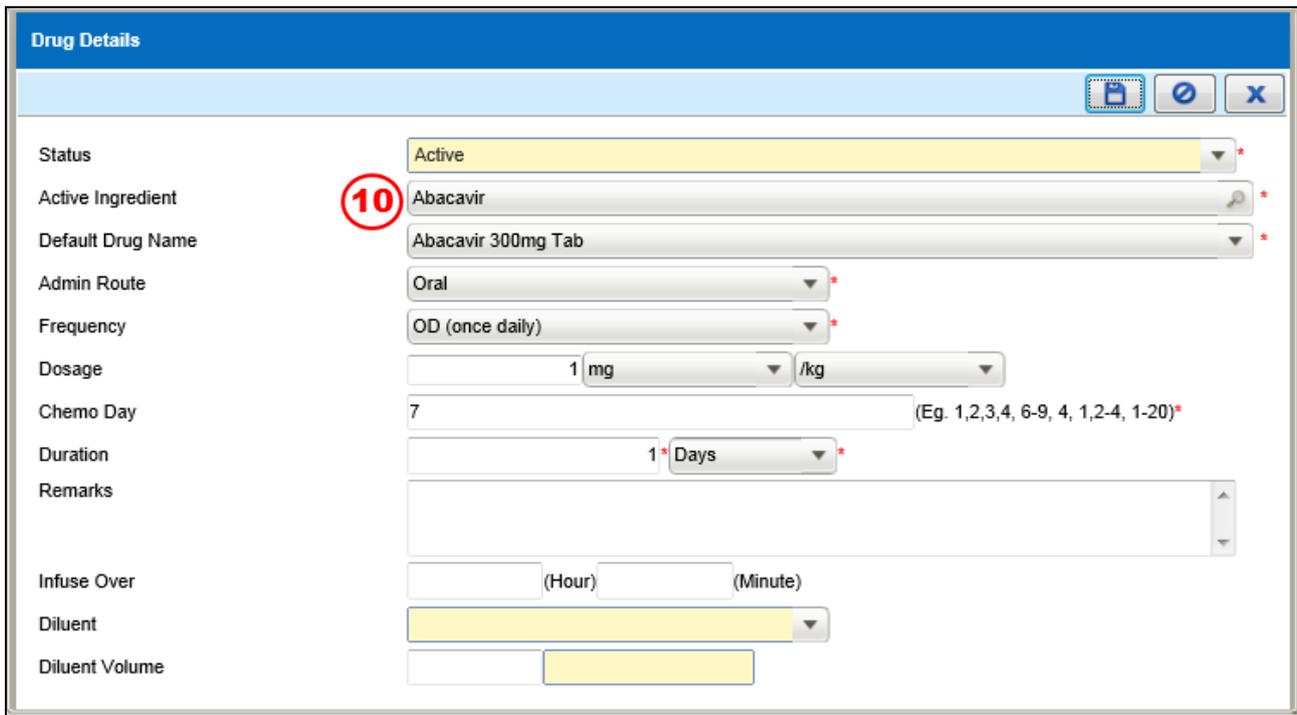
Figure 3.9.1-6 CDR Regimen Master

**STEP 8**

Click on the  button to edit the CDR Regimen screen

**STEP 9**

Click on the  button to add Regimen Drug



**Drug Details**

Status: Active \*

Active Ingredient: **10** Abacavir \*

Default Drug Name: Abacavir 300mg Tab \*

Admin Route: Oral \*

Frequency: OD (once daily) \*

Dosage: 1 mg /kg

Chemo Day: 7 (Eg. 1,2,3,4, 6-9, 4, 1,2-4, 1-20) \*

Duration: 1 Days \*

Remarks:

Infuse Over: (Hour) (Minute)

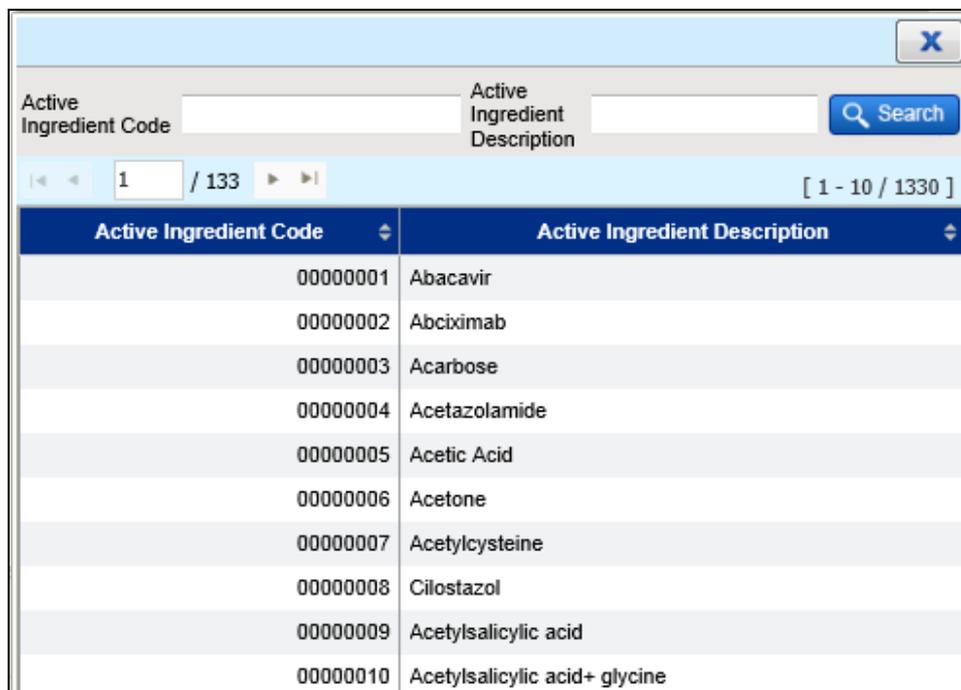
Diluent:

Diluent Volume:

Figure 3.9.1-7 CDR Regimen Master

**STEP 10**

Click on the  button to search **Active Ingredient** and double click on the selected Active Ingredient as per Figure 3.9.1-8



Active Ingredient Code: [ ] Active Ingredient Description: [ ] Search

1 / 133 [ 1 - 10 / 1330 ]

Active Ingredient Code	Active Ingredient Description
00000001	Abacavir
00000002	Abciximab
00000003	Acarbose
00000004	Acetazolamide
00000005	Acetic Acid
00000006	Acetone
00000007	Acetylcysteine
00000008	Cilostazol
00000009	Acetylsalicylic acid
00000010	Acetylsalicylic acid+ glycine

Figure 3.9.1-8 Active Ingredient

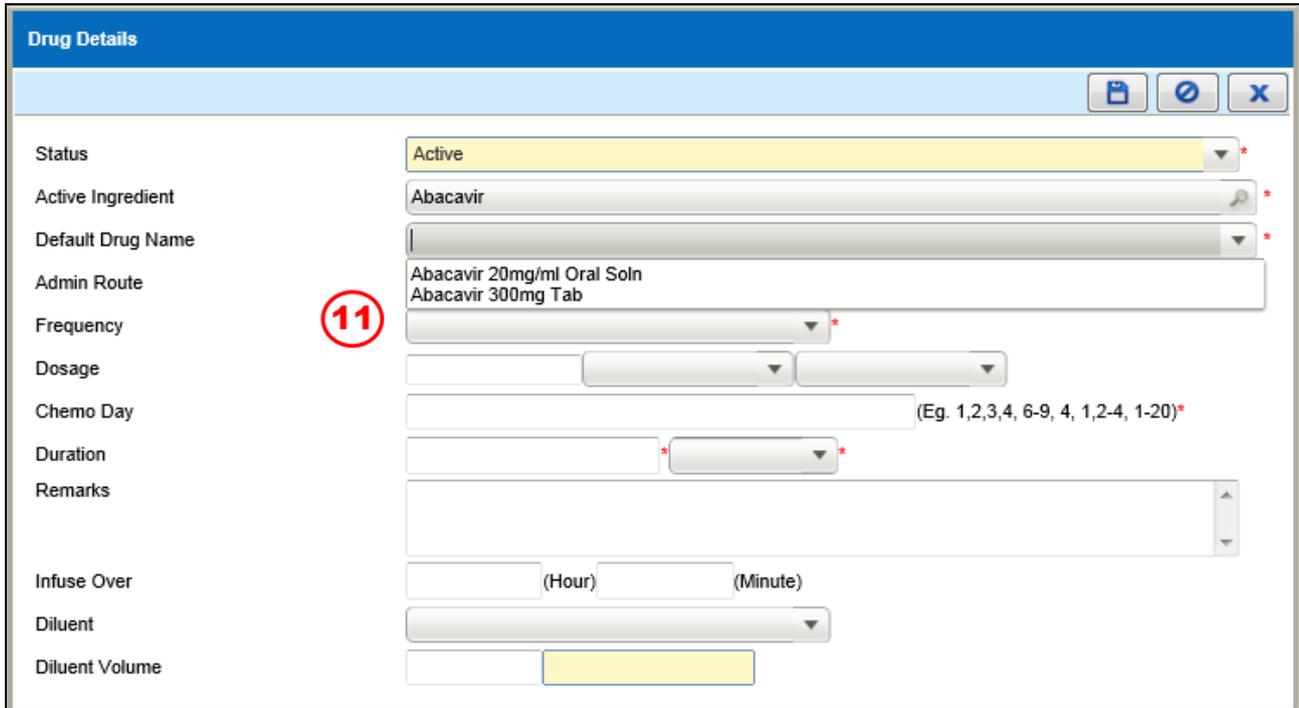


Figure 3.9.1-9 Active Ingredient

**STEP 11**

Click on Dropdown Box to select :

- **Default Drug Name**
- **Admin Route**
- **Frequency**

**Note**

**Default Drug Name, Admin Route and Frequency** will display the information based on selected **Active Ingredient**

**Drug Details**

🔒
🗑️
✕

Status	<input type="text" value="Active"/>
Active Ingredient	<input type="text" value="Abacavir"/>
Default Drug Name	<input type="text" value="Abacavir 300mg Tab"/>
Admin Route	<input type="text" value="Oral"/>
Frequency	<input type="text" value="OD (once daily)"/>
Dosage	<input type="text" value="1"/> <input type="text" value="mg"/> <input type="text" value="/kg"/>
Chemo Day	<input type="text" value="7"/> (Eg. 1,2,3,4, 6-9, 4, 1,2-4, 1-20)*
Duration	<input type="text" value="1"/> <input type="text" value="Days"/>
Remarks	<div style="border: 1px solid #ccc; height: 30px;"></div>
Infuse Over	<input type="text"/> (Hour) <input type="text"/> (Minute)
Diluent	<input type="text"/>
Diluent Volume	<input type="text"/>

Figure 3.9.1-10 Drug Details

**STEP 12**

Fill all the criteria:

- Fill the **Dosage**
- Fill the **Chemo Day**
- Fill the **Duration**

**Note**

**Remarks and Infuse Over**

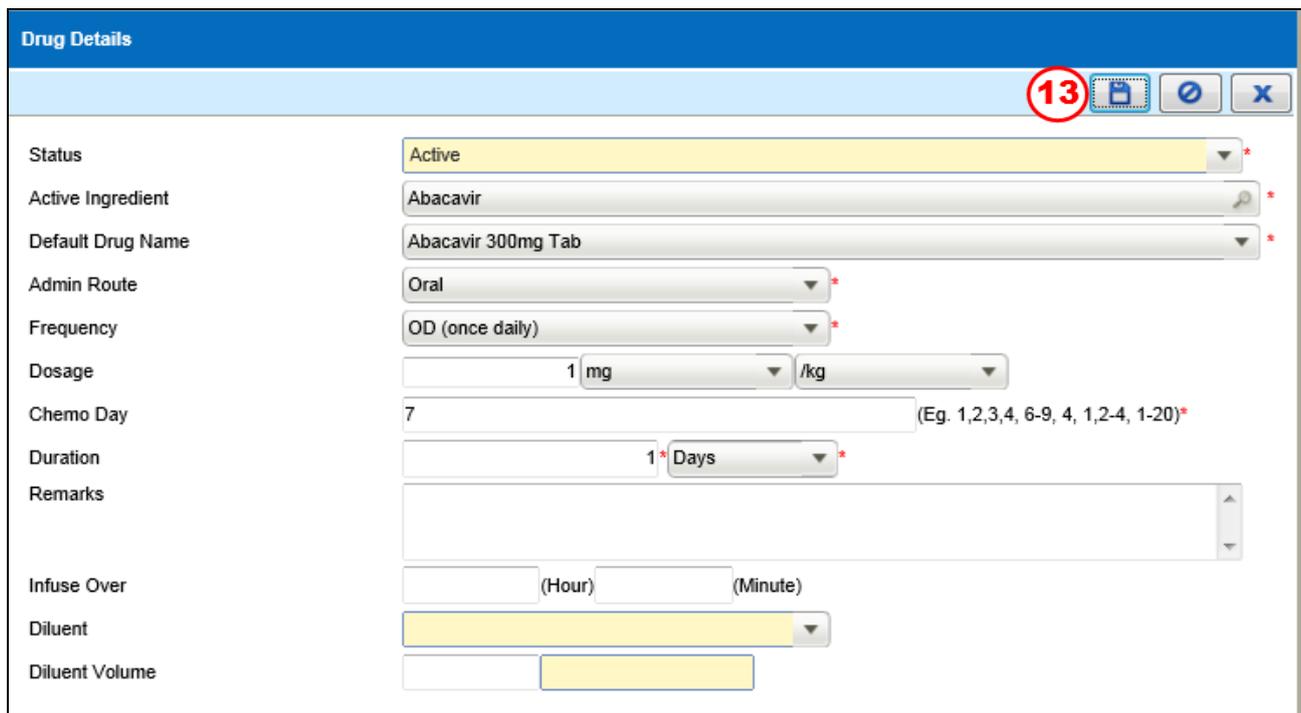
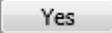


Figure 3.9.1-11 Drug Details

**STEP 13**

Click on the  button to save the data

**Note**

- Confirmation message as shown in Figure 3.9.1-12 will be displayed after user save the record and click  to save the record.

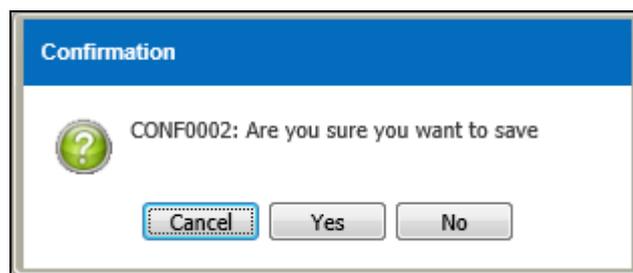


Figure 3.9.1-12 Confirmation Message

- Click on the  button to close the **Drug Details** screen.

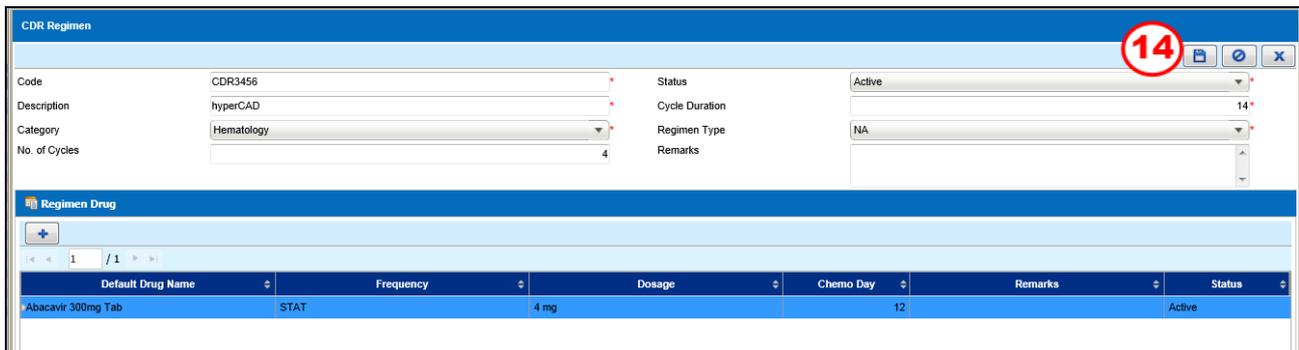


Figure 3.9.1-13 CDR Regimen

**STEP 14**

Click on the  button to save the data

**Note**

- Confirmation message as shown in Figure 3.9.1-14 will be displayed after user save the record

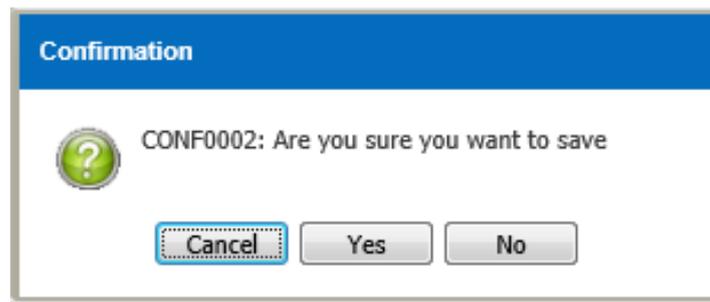


Figure 3.9.1-14 Confirmation Message

- Record will save when user click on the  button as shown in Figure 3.9.1-15

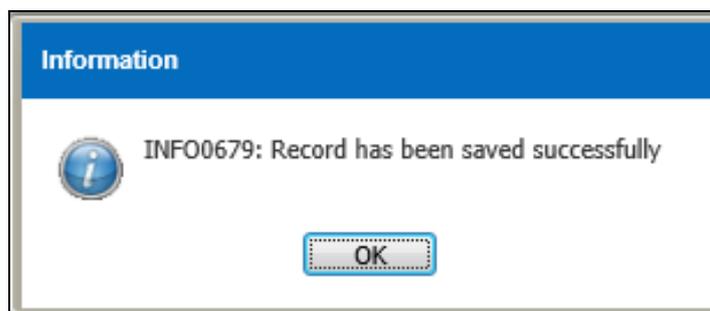
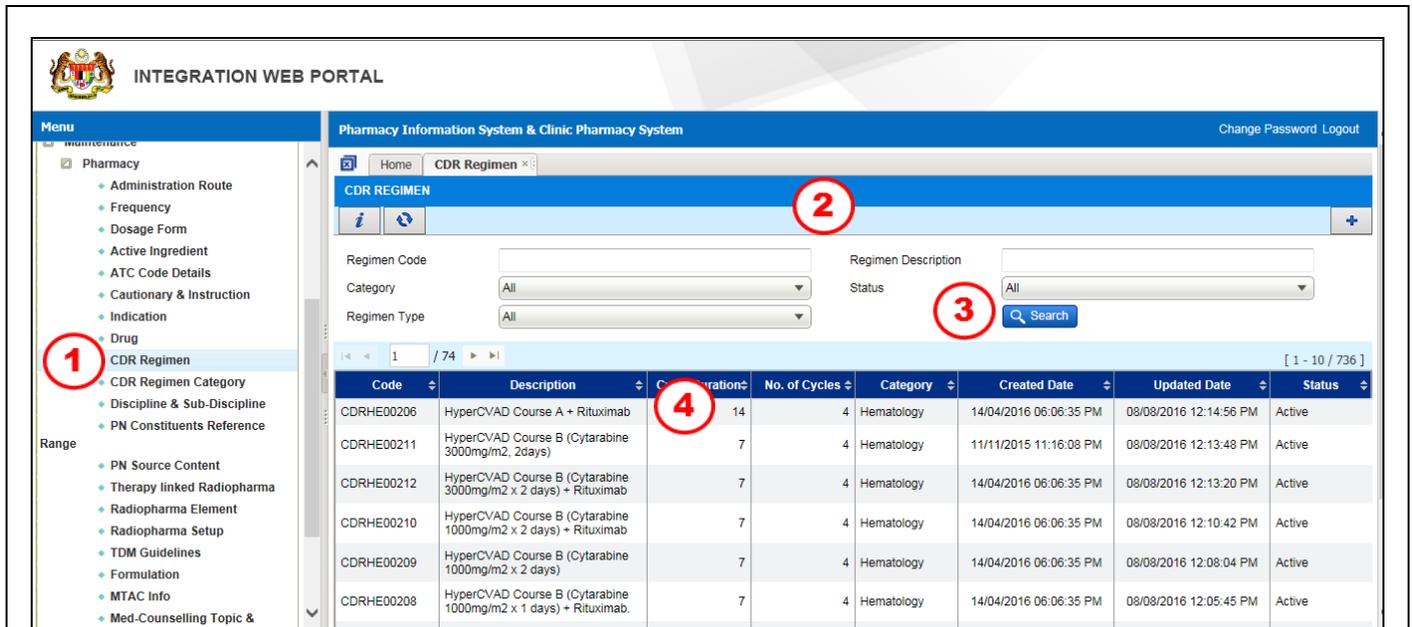


Figure 3.9.1-15 Information Message

- Click on the  button to close the CDR Regimen screen

### 3.9.2 Modify CDR Regimen Record

To modify CDR Regimen records, perform the steps below:



**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Menu

- Pharmacy
  - Administration Route
  - Frequency
  - Dosage Form
  - Active Ingredient
  - ATC Code Details
  - Cautionary & Instruction
  - Indication
  - Drug
  - CDR Regimen**
  - CDR Regimen Category
  - Discipline & Sub-Discipline
  - PN Constituents Reference

Range

- PN Source Content
- Therapy linked Radiopharma
- Radiopharma Element
- Radiopharma Setup
- TDM Guidelines
- Formulation
- MTAC Info
- Med-Counselling Topic &

CDR REGIMEN

Regimen Code:

Regimen Description:

Category:

Status:

Regimen Type:

Code	Description	Concentration	No. of Cycles	Category	Created Date	Updated Date	Status
CDRHE00206	HyperCVAD Course A + Rituximab	14	4	Hematology	14/04/2016 06:06:35 PM	08/08/2016 12:14:56 PM	Active
CDRHE00211	HyperCVAD Course B (Cytarabine 3000mg/m2, 2days)	7	4	Hematology	11/11/2015 11:16:08 PM	08/08/2016 12:13:48 PM	Active
CDRHE00212	HyperCVAD Course B (Cytarabine 3000mg/m2 x 2 days) + Rituximab	7	4	Hematology	14/04/2016 06:06:35 PM	08/08/2016 12:13:20 PM	Active
CDRHE00210	HyperCVAD Course B (Cytarabine 1000mg/m2 x 2 days) + Rituximab	7	4	Hematology	14/04/2016 06:06:35 PM	08/08/2016 12:10:42 PM	Active
CDRHE00209	HyperCVAD Course B (Cytarabine 1000mg/m2 x 2 days)	7	4	Hematology	14/04/2016 06:06:35 PM	08/08/2016 12:08:04 PM	Active
CDRHE00208	HyperCVAD Course B (Cytarabine 1000mg/m2 x 1 days) + Rituximab.	7	4	Hematology	14/04/2016 06:06:35 PM	08/08/2016 12:05:45 PM	Active

Figure 3.9.2-1 CDR Regimen Listing Page

#### STEP 1

Click on the Pharmacy menu followed by click on the CDR Regimen menu

#### STEP 2

To search for existing CDR Regimen record, user may search by criteria as follow:

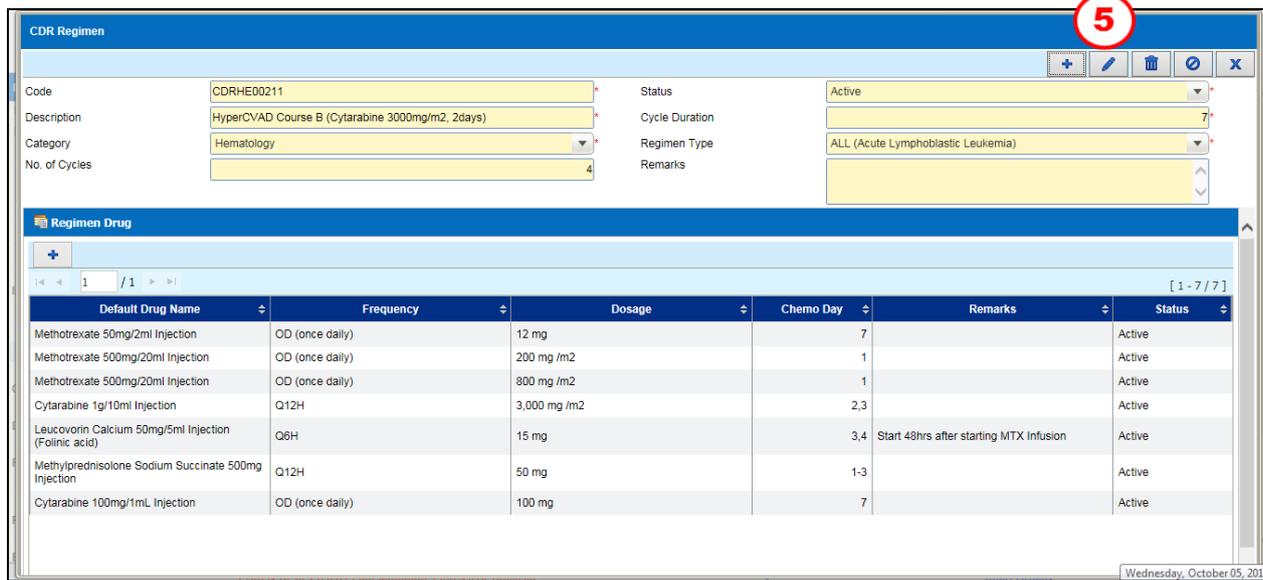
- Regimen Code
- Regimen Description
- Category
- Status
- Regimen Type

#### STEP 3

Click on the  button. The result(s) display will be based on the entered criteria.

#### STEP 4

Double click on the selected record and the details of the CDR Regimen record will be displayed as Figure 3.9.2-2



**CDR Regimen**

Code: CDRHE00211 | Status: Active

Description: HyperCVAD Course B (Cytarabine 3000mg/m2, 2days) | Cycle Duration: 7

Category: Hematology | Regimen Type: ALL (Acute Lymphoblastic Leukemia)

No. of Cycles: 4 | Remarks:

Default Drug Name	Frequency	Dosage	Chemo Day	Remarks	Status
Methotrexate 50mg/2ml Injection	OD (once daily)	12 mg	7		Active
Methotrexate 500mg/20ml Injection	OD (once daily)	200 mg /m2	1		Active
Methotrexate 500mg/20ml Injection	OD (once daily)	800 mg /m2	1		Active
Cytarabine 1g/10ml Injection	Q12H	3,000 mg /m2	2,3		Active
Leucovorin Calcium 50mg/5ml Injection (Folinic acid)	Q6H	15 mg	3,4	Start 48hrs after starting MTX Infusion	Active
Methylprednisolone Sodium Succinate 500mg Injection	Q12H	50 mg	1-3		Active
Cytarabine 100mg/1ml Injection	OD (once daily)	100 mg	7		Active

Wednesday, October 05, 2011

Figure 3.9.2-2 CDR Regimen

**STEP 5**

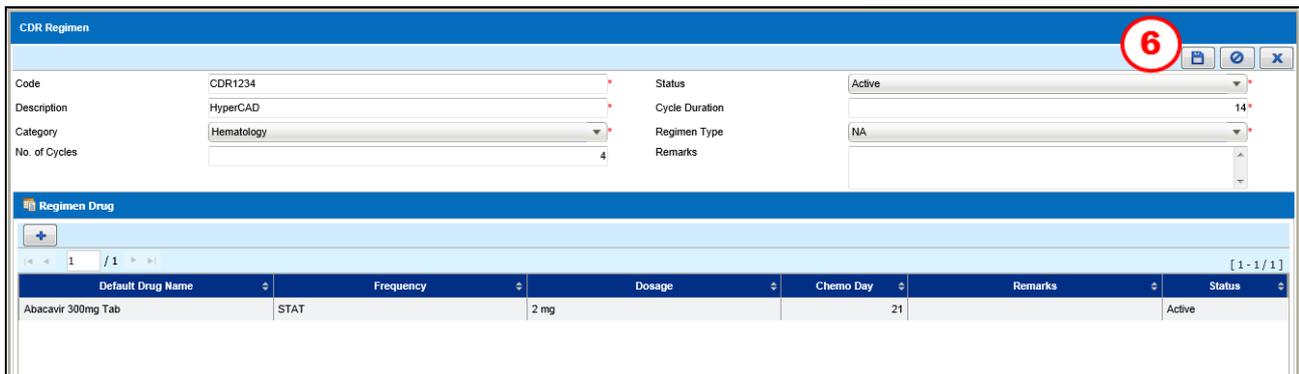


Click on the  button to modify CDR Regimen record

**Note**

User is allowed to edit the following description as per Figure 3.9.2-3 :

- **Code**
- **Status**
- **Description**
- **Cycle Duration**
- **Category**
- **Regimen Type**
- **No. of Cycle**
- **Add Regimen Drug**



**CDR Regimen**

Code: CDR1234 | Status: Active

Description: HyperCAD | Cycle Duration: 14

Category: Hematology | Regimen Type: NA

No. of Cycles: 4 | Remarks:

Default Drug Name	Frequency	Dosage	Chemo Day	Remarks	Status
Abacavir 300mg Tab	STAT	2 mg	21		Active

Figure 3.9.2-3 CDR Regimen

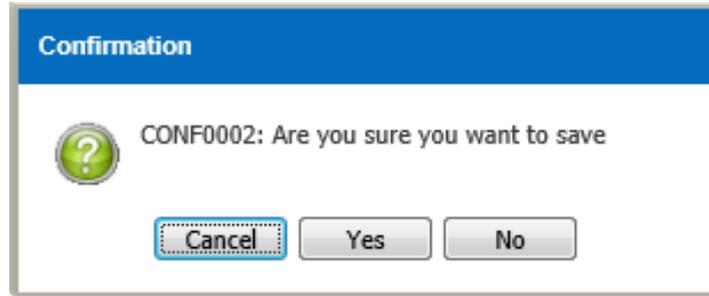
**STEP 6**



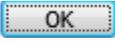
Click on the  button to save the data

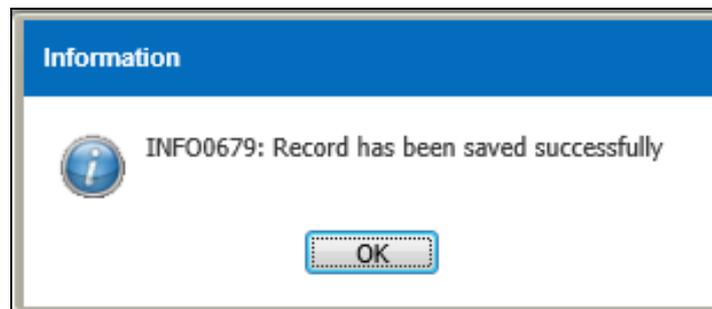
**Note**

- Confirmation message as shown in Figure 3.9.2-4 will be displayed after user save the record



**Figure 3.9.2-4 Confirmation Message**

- Record will save when user click on the  button as shown in Figure 3.9.2-5



**Figure 3.9.2-5 Confirmation Message**

- Click on the  button to close the CDR Regimen screen.

### 3.10 CDR Regimen Category

#### 3.10.1 Create New CDR Regimen Category

To Create New CDR Regimen Category records, perform the steps below:

Category	Regimen Type	Remarks	Created Date	Updated Date	Status
Oncology	Breast		11/11/2013 09:53:13 AM	08/06/2016 10:16:17 AM	Active
Hematology	Multiple Myeloma		23/11/2015 01:49:21 PM	23/11/2015 01:49:21 PM	Active
Hematology	NHL (Non-Hodgkin's Lymphoma)		12/11/2015 08:40:19 AM	12/11/2015 08:40:19 AM	Active
Hematology	HL (Hodgkin's Lymphoma)		12/11/2015 07:41:57 AM	12/11/2015 07:41:57 AM	Active
Hematology	ALL (Acute Lymphoblastic Leukemia)		11/11/2015 10:52:47 PM	11/11/2015 10:52:47 PM	Active
Hematology	APML (Acute Promyelocytic Leukemia, AML-M3)		11/11/2015 10:00:19 PM	11/11/2015 10:00:19 PM	Active
Hematology	AML (Acute Myeloid Leukaemia)		11/11/2015 03:48:59 PM	11/11/2015 03:48:59 PM	Active
Paediatric	T-Cell ALL / NHL		14/10/2015 01:30:05 PM	14/10/2015 01:30:05 PM	Active
Oncology	Uterus		11/11/2013 09:53:13 AM	13/10/2015 04:42:17 PM	Inactive
Oncology	-		09/10/2015 10:48:22 AM	09/10/2015 10:48:22 AM	Active

Figure 3.10.1-1 CDR Regimen Category Listing Page

**STEP 1**

Click on the Maintenance menu followed by click on the Pharmacy and click on the CDR Regimen Category sub menu

**STEP 2**

Click on the  button to create new record and Regimen Category screen will be displayed as Figure 3.10.1-2

Figure 3.10.1-2 Regimen Category

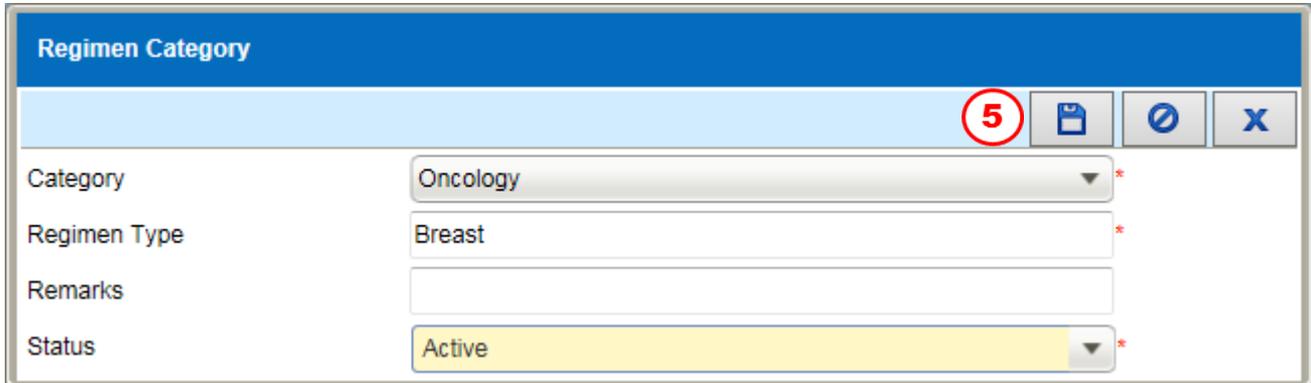
**STEP 3**

Select **Category** from drop down box:

- **Hematology**
- **Oncology**
- **Others**
- **Paediatric**

**STEP 4**

Enter **Regimen Type**



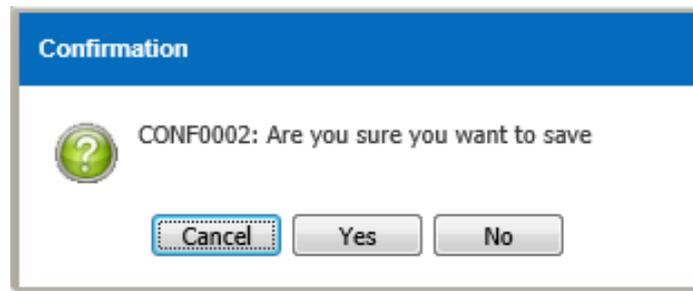
**Figure 3.10.1-3 Regimen Category**

**STEP 5**

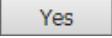
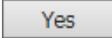
Click on the  button to save the record

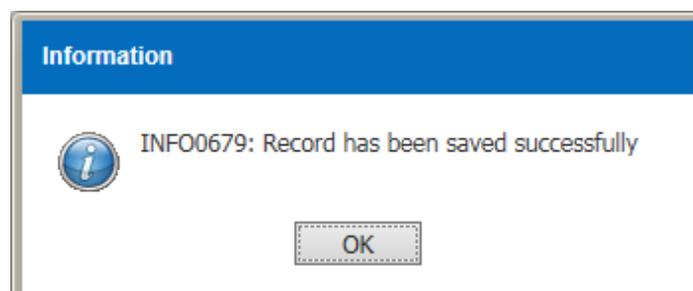
**Note**

- System will display a Confirmation Message as Figure 3.10.1-4



**Figure 3.10.1-4 Confirmation Message**

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.10.1-5



**Figure 3.10.1-5 Information Message**

Click on the  button to confirmed the record

### 3.10.2 Modify CDR Regimen Category

To modify CDR Regimen Category records, perform the steps below:

Category	Regimen Type	Remarks	Created Date	Updated Date	Status
Oncology	Breast		11/11/2013 09:53:13 AM	08/06/2016 10:16:17 AM	Active
Hematology	Multiple Myeloma		23/11/2015 01:49:21 PM	23/11/2015 01:49:21 PM	Active
Hematology	NHL (Non-Hodgkin's Lymphoma)		12/11/2015 08:40:19 AM	12/11/2015 08:40:19 AM	Active
Hematology	HL (Hodgkin's Lymphoma)		12/11/2015 07:41:57 AM	12/11/2015 07:41:57 AM	Active
Hematology	ALL (Acute Lymphoblastic Leukemia)		11/11/2015 10:52:47 PM	11/11/2015 10:52:47 PM	Active
Hematology	APML (Acute Promyelocytic Leukemia, AML-M3)		11/11/2015 10:00:19 PM	11/11/2015 10:00:19 PM	Active
Hematology	AML (Acute Myeloid Leukaemia)		11/11/2015 03:48:59 PM	11/11/2015 03:48:59 PM	Active
Paediatric	T-Cell ALL / NHL		14/10/2015 01:30:05 PM	14/10/2015 01:30:05 PM	Active
Oncology	Uterus		11/11/2013 09:53:13 AM	13/10/2015 04:42:17 PM	Inactive
Oncology	-		09/10/2015 10:48:22 AM	09/10/2015 10:48:22 AM	Active

Figure 3.10.2-1 CDR Regimen Category Listing Page

#### STEP 1

Click on the Maintenance menu followed by click on the Pharmacy and click on the CDR Regimen Category sub menu

#### STEP 2

Click on the selected record

Figure 3.10.2-2 Regimen Category

#### STEP 3

Click on the  button to edit the record

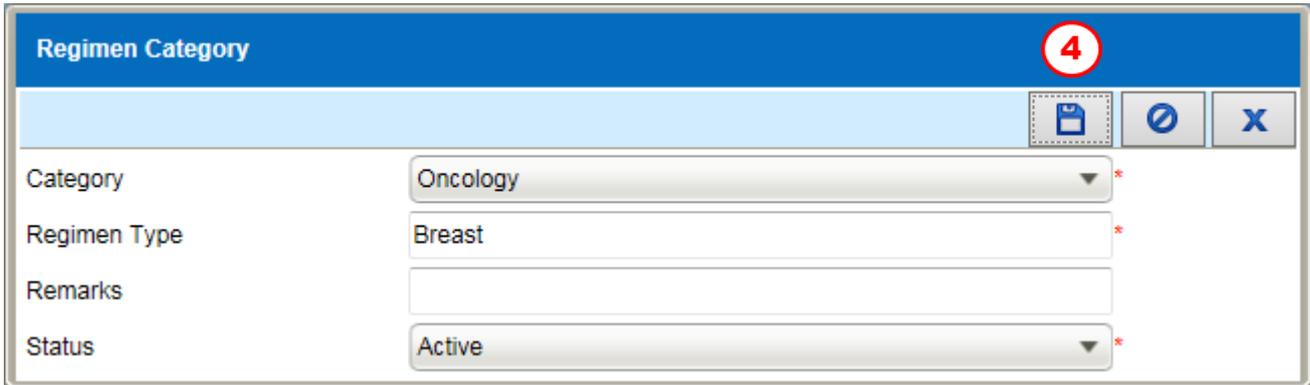


Figure 3.10.2-3 Regimen Category

**Note**

User is allowing to edit:

- **Category**
- **Regimen Type**
- **Remarks**
- **Status**

**STEP 4**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.10.2-4

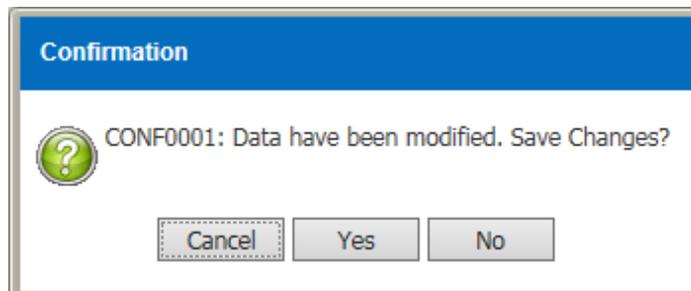
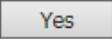
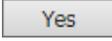


Figure 3.10.2-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.10.2-5

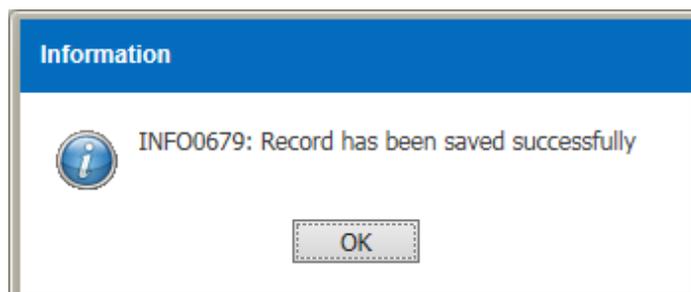


Figure 3.10.2-5 Information Message

- Click on the  button to confirmed the edited record

### 3.11 Discipline and Sub Discipline

#### 3.11.1 Create New Discipline and Sub Discipline

To Create Discipline and Sub Discipline records, perform the steps below:

**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Discipline & Sub-Discipline

**DISCIPLINE & SUB-DISCIPLINE**

Discipline Code  Discipline Name

[ 1 - 10 / 89 ]

Discipline Code	Discipline Name	Created Date	Updated Date	Status
132	Uro-Gynaecology	17/06/2015 03:11:36 PM	17/06/2015 03:13:02 AM	Active
131	Reproductive Medicine	17/06/2015 03:10:16 PM	17/06/2015 03:11:02 AM	Active
129	Gynae-Oncology	17/06/2015 03:07:55 PM	17/06/2015 03:08:02 AM	Active
125	Upper Gastrointestinal Surgery	17/06/2015 03:04:30 PM	17/06/2015 03:05:02 AM	Active
72	Burn and Trauma Surgery	30/10/2013 04:25:21 PM	17/06/2015 03:02:02 AM	Active
26	Emergency Medicine	30/10/2013 04:25:21 PM	17/06/2015 02:58:02 AM	Active
71	Rehabilitation Medicine	30/10/2013 04:25:21 PM	17/06/2015 02:44:02 AM	Active
57	Transfusion Medicine	30/10/2013 04:25:21 PM	26/05/2015 11:37:02 AM	Active
58	Chemical Pathology	30/10/2013 04:25:21 PM	26/05/2015 11:34:02 AM	Active
66	Clinical Oncology	30/10/2013 04:25:21 PM	26/05/2015 11:16:02 AM	Active

Figure 3.11.1-1 Discipline and Sub Discipline Master Listing Page

#### STEP 1

Click on the Maintenance menu followed by click on the Pharmacy and click on Discipline & Sub-Discipline sub menu

#### STEP 2

Click on the  button to create a new record and Discipline screen will be displayed as Figure 3.11.1-2

**Discipline**

Discipline Code  \*

Discipline Name  \*

Status

Remarks

**Sub Discipline List**

[ 1 - 1 / 1 ]

Sub Discipline Code	Sub Discipline Name	Status
No Records Found!		

Double Click To View/Edit

Figure 3.11.1-2 Discipline

### STEP 3

Enter **Discipline Code** and **Discipline Name**

#### Note

Enter **Remarks** (optional)

### STEP 4

Click on the  button to save the record

#### Note

- System will display a Confirmation Message as Figure 3.11.1-3

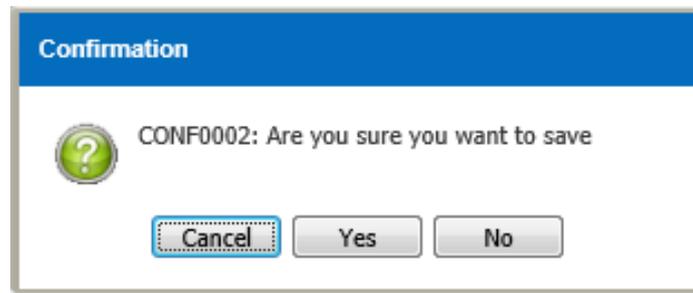
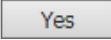
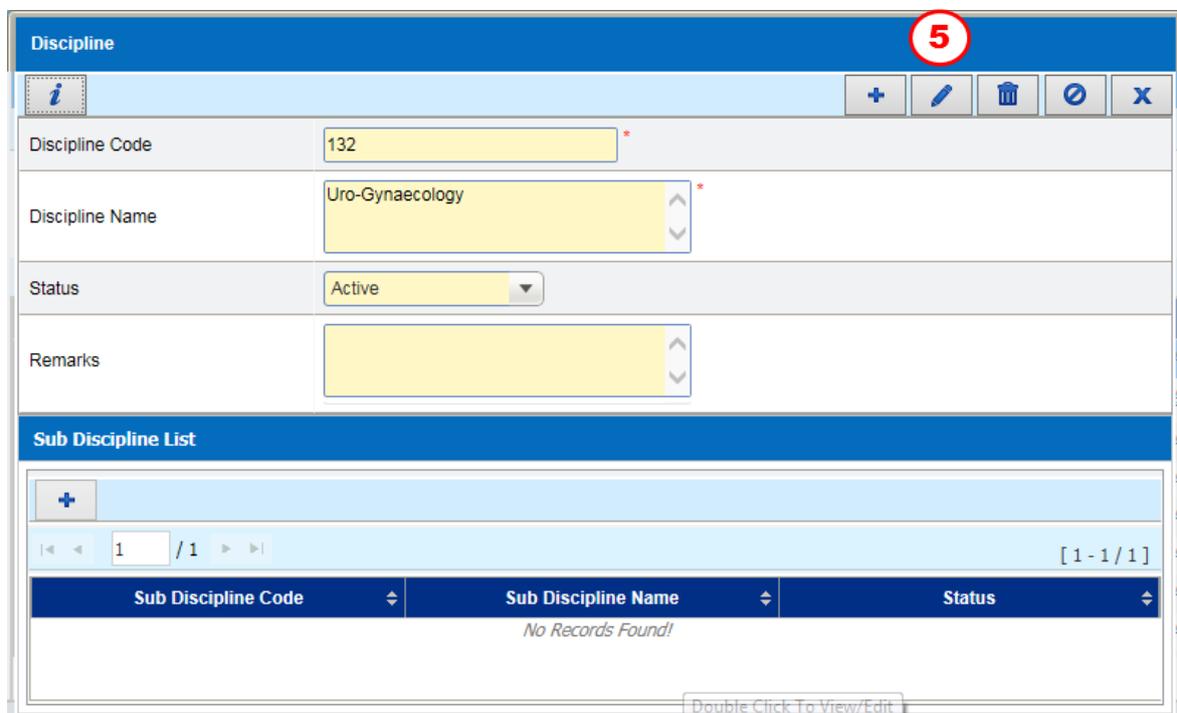


Figure 3.11.1-3 Confirmation Message

- Click on the  button to save the record



The "Discipline" form is displayed in a window. The title bar is blue with the word "Discipline" and a red circle containing the number "5". Below the title bar is a light blue header with an information icon and several action icons (+, edit, delete, refresh, close). The form fields are: "Discipline Code" (text box with "132"), "Discipline Name" (text box with "Uro-Gynaecology"), "Status" (dropdown menu with "Active"), and "Remarks" (text area). Below these fields is a "Sub Discipline List" section with a blue header, a "+" button, a pagination bar showing "1 / 1", and a table with columns "Sub Discipline Code", "Sub Discipline Name", and "Status". The table is currently empty with the text "No Records Found!". A tooltip at the bottom right says "Double Click To View/Edit".

Figure 3.11.1-4 Discipline

### STEP 5

Click on the  button to edit the record

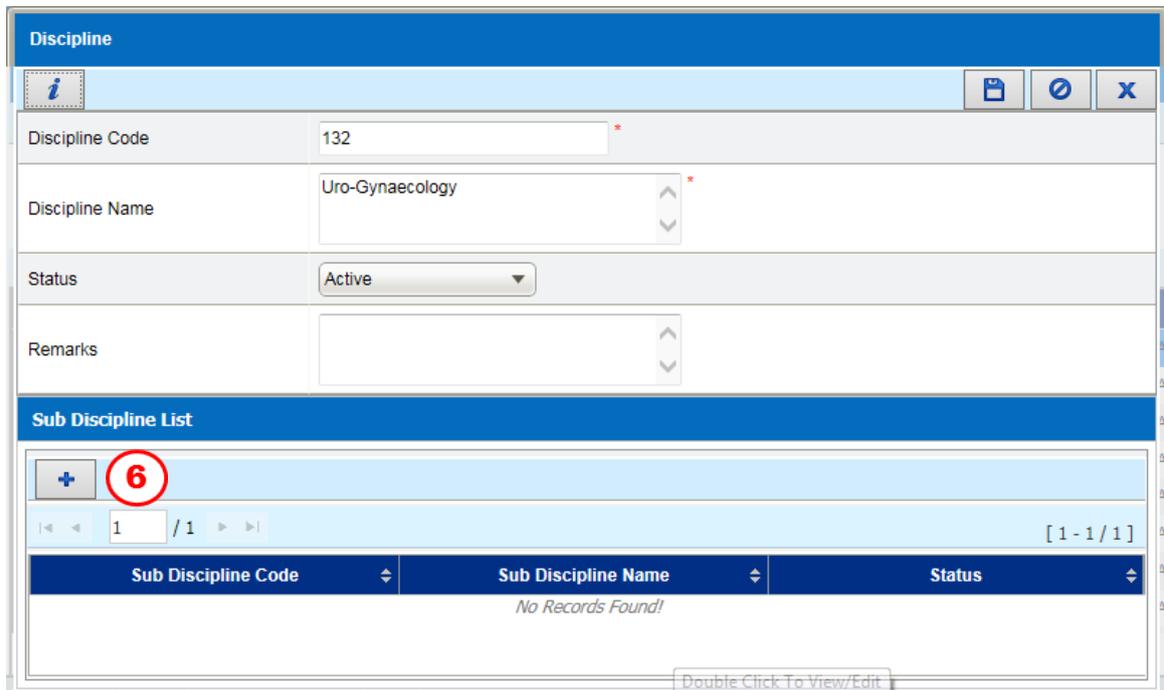


Figure 3.11.1-5 Discipline

**STEP 6**

Click on the  button to add Sub Discipline into the List and Sub Discipline screen will be displayed as Figure 3.11.1-6

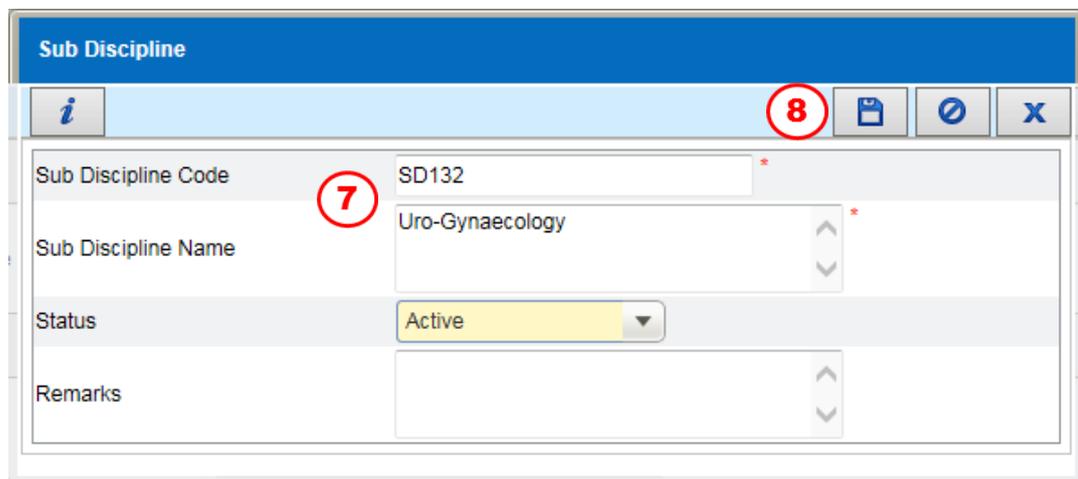


Figure 3.11.1-6 Sub Discipline

**STEP 7**

Enter **Sub Discipline Code** and **Sub Discipline Name**

**Note**

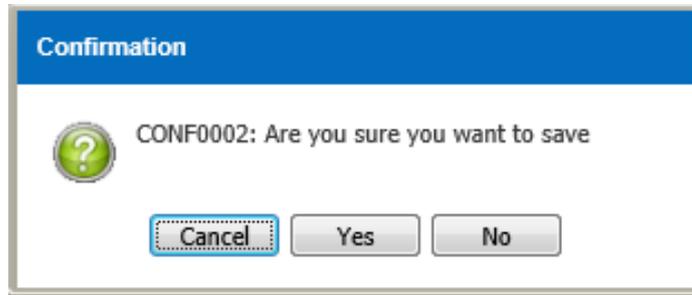
Enter **Remarks** (optional)

**STEP 8**

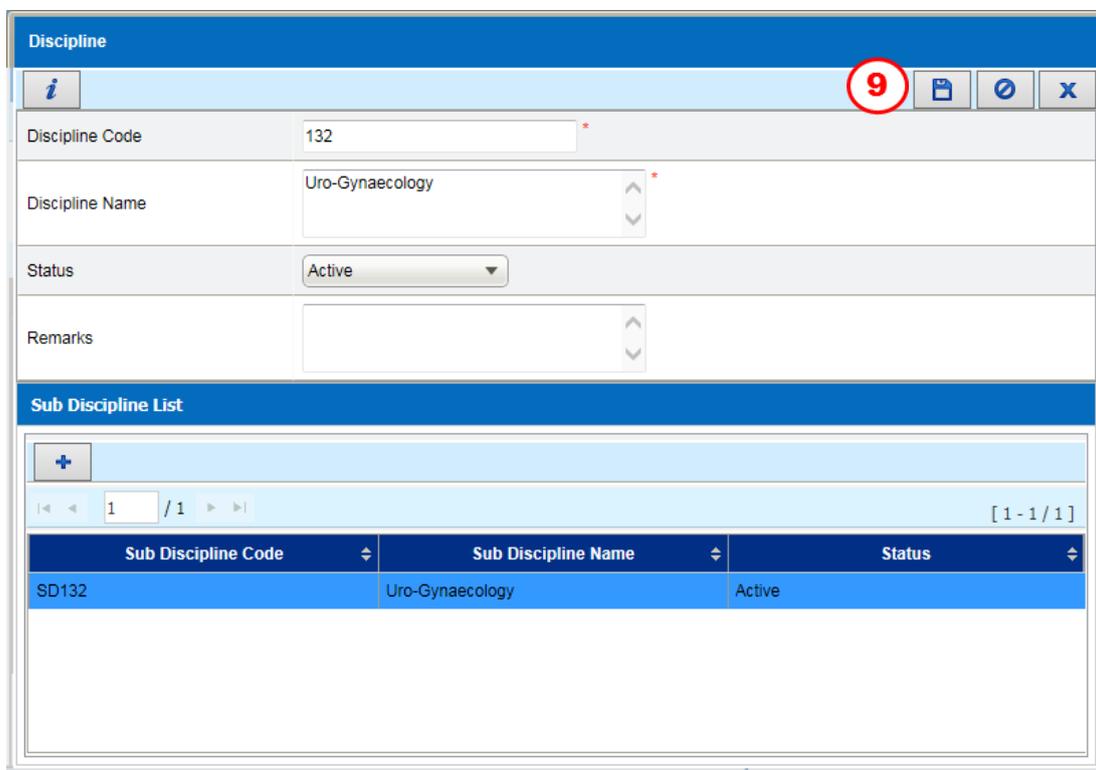
Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.11.1-7



**Figure 3.11.1-7 Confirmation Message**



**Figure 3.11.1-8 Discipline**

**Note**

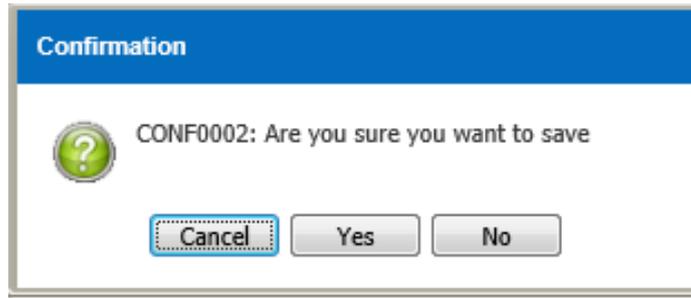
User can add more than 1 Sub Discipline by repeating **STEP 6** to **STEP 8**

**STEP 9**

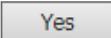
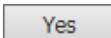
Click on the  button to save the record

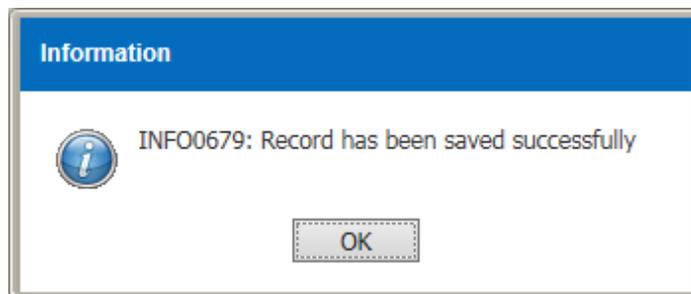
**Note**

- System will display a Confirmation Message as Figure 3.11.1-9

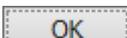


**Figure 3.11.1-9 Confirmation Message**

- Click on the  button to save the record
- Information Message will display after click on the  button as Figure 3.11.1-10



**Figure 3.11.1-10 Information Message**

Click on the  button to confirmed the record

### 3.11.2 Modify Discipline and Sub Discipline

To modify Discipline and Sub Discipline records, perform the steps below:

**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Discipline & Sub-Discipline

**DISCIPLINE & SUB-DISCIPLINE**

Discipline Code  Discipline Name

Discipline Code	Discipline Name	Created Date	Updated Date	Status
132	Uro-Gynaecology	17/06/2015 03:11:36 PM	17/06/2015 03:13:02 AM	Active
131	Reproductive Medicine	17/06/2015 03:10:16 PM	17/06/2015 03:11:02 AM	Active
129	Gynae-Oncology	17/06/2015 03:07:55 PM	17/06/2015 03:08:02 AM	Active
125	Upper Gastrointestinal Surgery	17/06/2015 03:04:30 PM	17/06/2015 03:05:02 AM	Active
72	Burn and Trauma Surgery	30/10/2013 04:25:21 PM	17/06/2015 03:02:02 AM	Active
26	Emergency Medicine	30/10/2013 04:25:21 PM	17/06/2015 02:58:02 AM	Active
71	Rehabilitation Medicine	30/10/2013 04:25:21 PM	17/06/2015 02:44:02 AM	Active
57	Transfusion Medicine	30/10/2013 04:25:21 PM	26/05/2015 11:37:02 AM	Active
58	Chemical Pathology	30/10/2013 04:25:21 PM	26/05/2015 11:34:02 AM	Active
66	Clinical Oncology	30/10/2013 04:25:21 PM	26/05/2015 11:16:02 AM	Active

Figure 3.11.2-1 Discipline and Sub Discipline Listing Page

#### STEP 1

Click on the Maintenance menu followed by click on the Pharmacy and click on Discipline & Sub-Discipline sub menu

#### STEP 2

Click on the selected record

**Discipline**

Discipline Code  \*

Discipline Name  \*

Status

Remarks

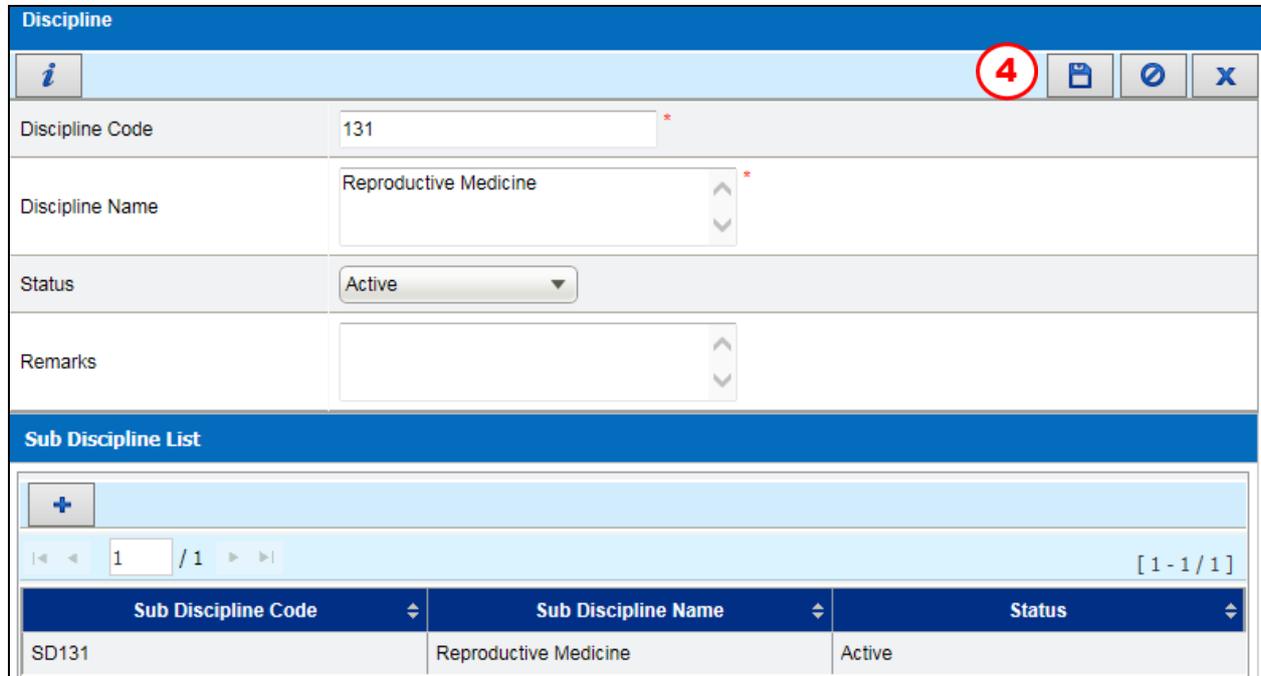
**Sub Discipline List**

Sub Discipline Code	Sub Discipline Name	Status
SD131	Reproductive Medicine	Active

Figure 3.11.2-2 Discipline and Sub Discipline

### STEP 3

Click on the  button to edit the record



**Discipline**

Discipline Code: 131 \*

Discipline Name: Reproductive Medicine \*

Status: Active

Remarks:

**Sub Discipline List**

1 / 1 [ 1 - 1 / 1 ]

Sub Discipline Code	Sub Discipline Name	Status
SD131	Reproductive Medicine	Active

Figure 3.11.2-3 Discipline and Sub Discipline

#### **Note**

User is allowing to edit:

- **Discipline Code**
- **Discipline Name**
- **Status**
- **Remarks**
- **Add Sub Discipline**

### STEP 4

Click on the  button to save the edited record

#### **Note**

- System will display a Confirmation Message as Figure 3.11.2-4

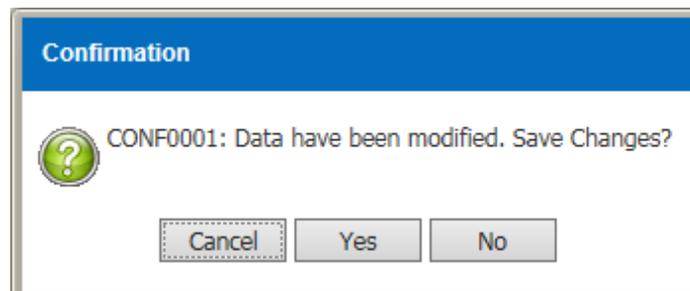
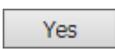
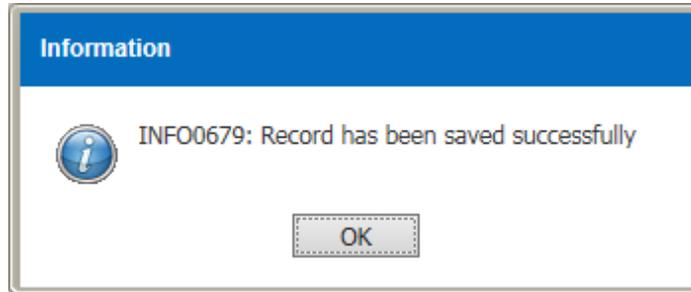


Figure 3.11.2-4 Confirmation Message

- Click on the  button to save the edited record

- Information Message will display after click on the  button as Figure 3.11.2-5

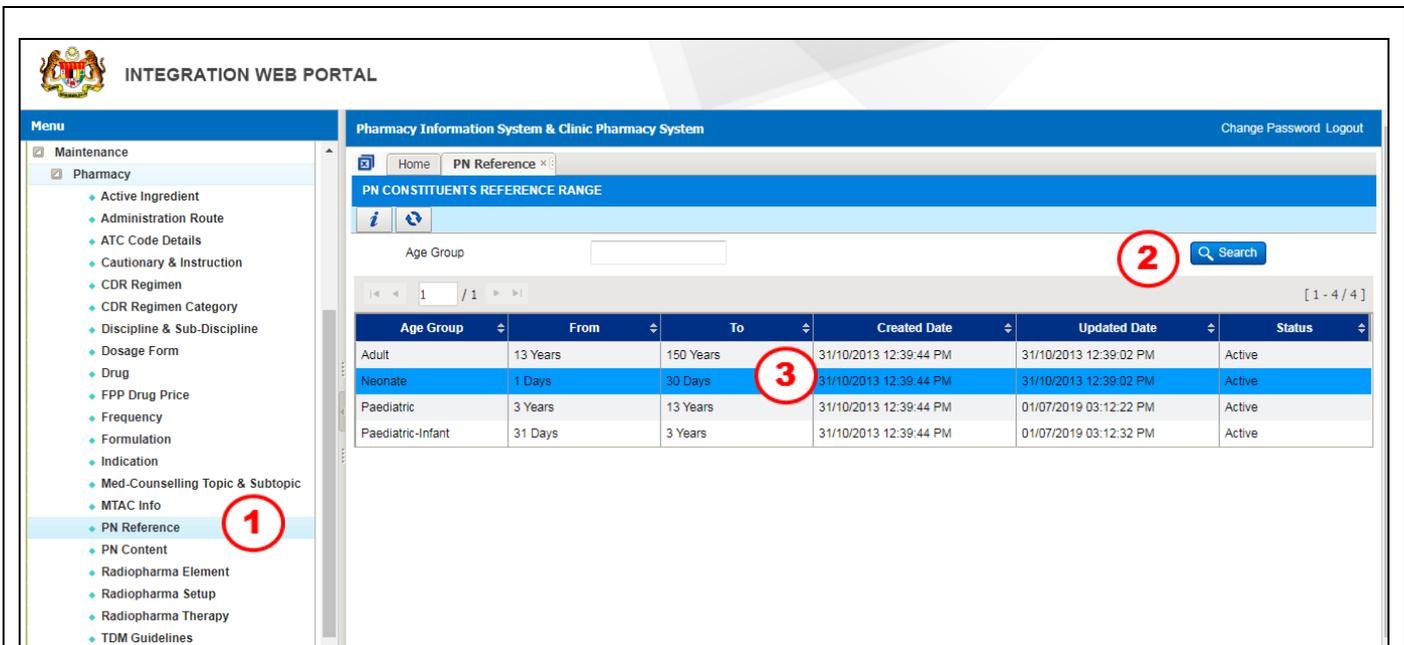


**Figure 3.11.2-5 Information Message**

- Click on the  button to confirmed the edited record

### 3.12 PN Constituents Reference Range

To view and modify PN Constituents Reference Range records, perform step below:



**Integration Web Portal**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home PN Reference x1

**PN CONSTITUENTS REFERENCE RANGE**

Age Group  2

[ 1 - 4 / 4 ]

Age Group	From	To	Created Date	Updated Date	Status
Adult	13 Years	150 Years	31/10/2013 12:39:44 PM	31/10/2013 12:39:02 PM	Active
Neonate	1 Days	30 Days	31/10/2013 12:39:44 PM	31/10/2013 12:39:02 PM	Active
Paediatric	3 Years	13 Years	31/10/2013 12:39:44 PM	01/07/2019 03:12:22 PM	Active
Paediatric-Infant	31 Days	3 Years	31/10/2013 12:39:44 PM	01/07/2019 03:12:32 PM	Active

Figure 3.12-1 PN Constituents Reference Range Listing Page

#### STEP 1

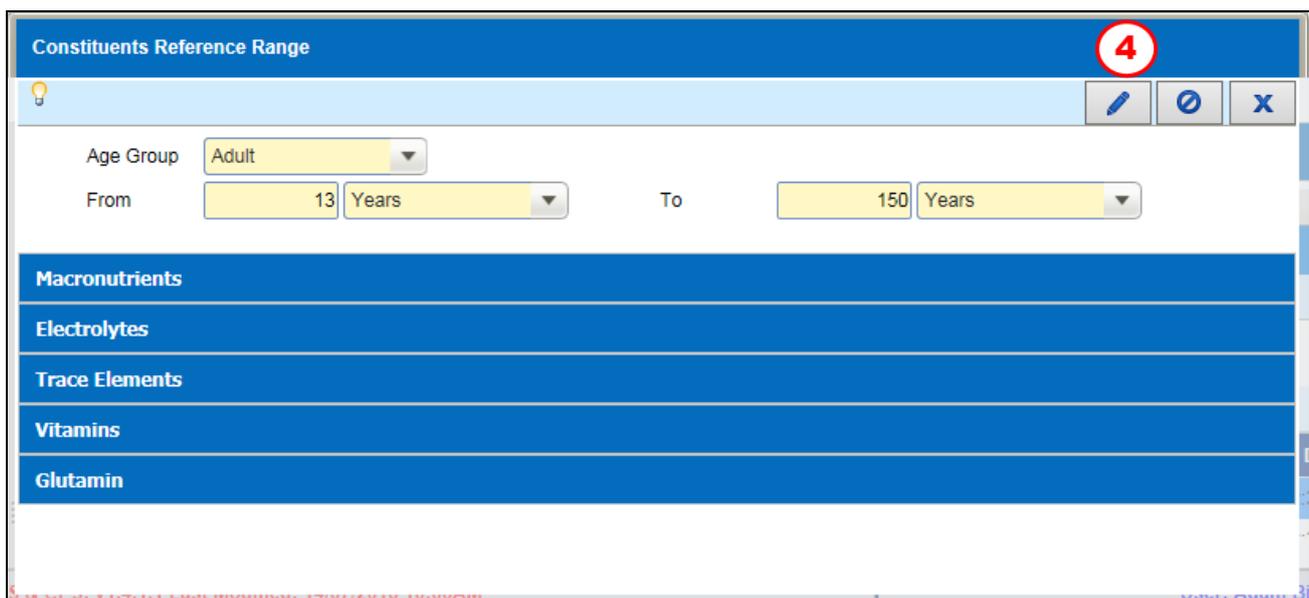
Click on the Pharmacy menu followed by click on the PN Reference sub menu.

#### STEP 2

Click on the  button and system will display related record

#### STEP 3

Double click on record and system will display Constituents Reference Range screen as Figure 3.12-2



**Constituents Reference Range** 4

Age Group

From  Years To  Years

Macronutrients

Electrolytes

Trace Elements

Vitamins

Glutamin

Figure 3.12-2 Constituents Reference Range

**STEP 4**

Click on the  button to edit the record

**Note**

There are 4 section which user can edit:

**a) Macronutrients**

Macronutrients			
Protein	Min	<input type="text" value="0.5"/>	Max <input type="text" value="2"/> Avg <input type="text" value="1.25"/>
Carbohydrate	Min	<input type="text" value="3"/>	Max <input type="text" value="5"/> Avg <input type="text" value="4"/>
Lipid	Min	<input type="text" value="0.5"/>	Max <input type="text" value="2"/> Avg <input type="text" value="1.25"/>

**Figure 3.12-3 Macronutrients**

- User is allowing to edit:
  - **Protein**
  - **Carbohydrate**
  - **Lipid**

**b) Electrolytes**

Electrolytes			
Sodium	Min	<input type="text" value="1"/>	Max <input type="text" value="2"/> Avg <input type="text" value="1.5"/>
Potassium	Min	<input type="text" value="0.7"/>	Max <input type="text" value="1.5"/> Avg <input type="text" value="1.1"/>
Chloride	Min	<input type="text" value="1.3"/>	Max <input type="text" value="2"/> Avg <input type="text" value="1.65"/>
Acetate	Min	<input type="text" value="0"/>	Max <input type="text" value="0"/> Avg <input type="text" value="0"/>
Phosphate	Min	<input type="text" value="0.5"/>	Max <input type="text" value="0.7"/> Avg <input type="text" value="0.6"/>
Magnesium	Min	<input type="text" value="0.05"/>	Max <input type="text" value="0.15"/> Avg <input type="text" value="0.1"/>
Calcium	Min	<input type="text" value="0.1"/>	Max <input type="text" value="0.15"/> Avg <input type="text" value="0.12"/>

**Figure 3.12-4 Electrolytes**

- User is allow to edit:
  - **Sodium**
  - **Potassium**
  - **Chloride**
  - **Acetate**
  - **Phosphate**
  - **Magnesium**
  - **Calcium**

**c) Trace Elements**

Trace Elements			
Trace Element Solution	Min	<input type="text" value="0"/>	Max <input type="text" value="10"/> Avg <input type="text" value="5"/>

**Figure 3.12-5 Trace Elements**

- User is allowing to edit **Trace Element Solution**

**d) Vitamins**

Vitamins			
Vitamin Solution	Min	<input type="text" value="0"/>	Max <input type="text" value="10"/> Avg <input type="text" value="5"/>
Fat Soluble	Min	<input type="text" value="0"/>	Max <input type="text" value="10"/> Avg <input type="text" value="5"/>
Water Soluble	Min	<input type="text" value="0"/>	Max <input type="text" value="10"/> Avg <input type="text" value="5"/>

**Figure 3.12-6 Vitamins**

- User is allowing to edit:
  - **Vitamin Solution**
  - **Fat Soluble**
  - **Water Soluble**

**e) Glutamin**

Glutamin			
Glutamin	Min	<input type="text" value="1.5"/>	Max <input type="text" value="2.5"/> Avg <input type="text" value="2"/>

**Figure 3.12-7 Glutamin**

- User is allow to edit **Glutamin**

**Constituents Reference Range**

5   

Age Group:

From:   To:

- Macronutrients**
- Electrolytes**
- Trace Elements**
- Vitamins**
- Glutamin**

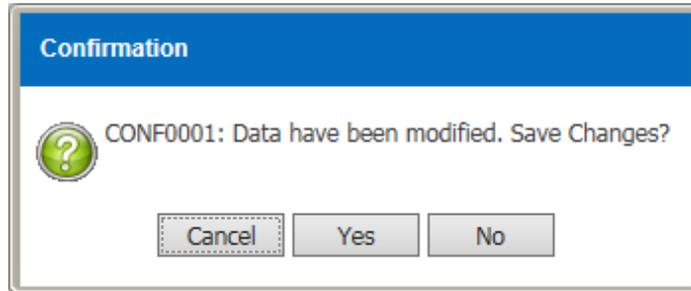
**Figure 3.12-8 Constituents Reference Range**

**STEP 5**

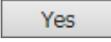
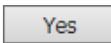
Click on the  button to save the edited record

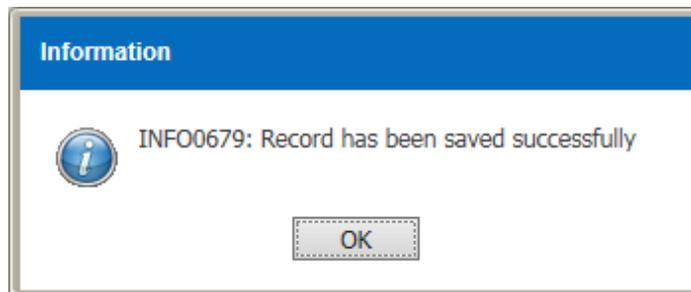
**Note**

- System will display a Confirmation Message as Figure 3.12-9



**Figure 3.12-9 Confirmation Message**

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.12-10

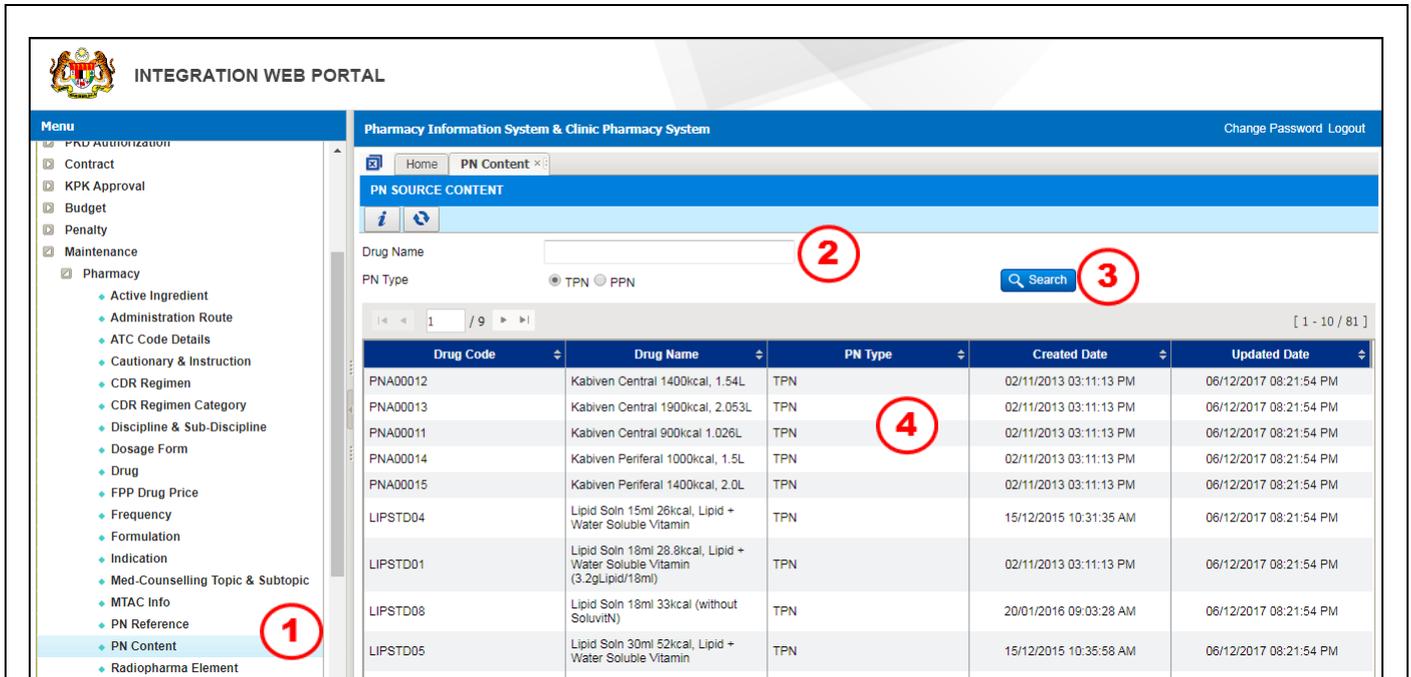


**Figure 3.12-10 Information Message**

- Click on the  button to confirmed the edited record

### 3.13 PN Source Content

To create and modify PN Source Content records, perform step below:



**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home PN Content

**PN SOURCE CONTENT**

Drug Name  **2**

PN Type  TPN  PPN

**3**

[ 1 - 10 / 81 ]

Drug Code	Drug Name	PN Type	Created Date	Updated Date
PNA00012	Kabiven Central 1400kcal, 1.54L	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
PNA00013	Kabiven Central 1900kcal, 2.053L	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
PNA00011	Kabiven Central 900kcal 1.026L	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
PNA00014	Kabiven Periferal 1000kcal, 1.5L	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
PNA00015	Kabiven Periferal 1400kcal, 2.0L	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
LIPSTD04	Lipid Soln 15ml 26kcal, Lipid + Water Soluble Vitamin	TPN	15/12/2015 10:31:35 AM	06/12/2017 08:21:54 PM
LIPSTD01	Lipid Soln 18ml 28.8kcal, Lipid + Water Soluble Vitamin (3.2g/Lipid/18ml)	TPN	02/11/2013 03:11:13 PM	06/12/2017 08:21:54 PM
LIPSTD08	Lipid Soln 18ml 33kcal (without SoluvitN)	TPN	20/01/2016 09:03:28 AM	06/12/2017 08:21:54 PM
LIPSTD05	Lipid Soln 30ml 52kcal, Lipid + Water Soluble Vitamin	TPN	15/12/2015 10:35:58 AM	06/12/2017 08:21:54 PM

Figure 3.13-1 PN Source Content Listing Page

#### STEP 1

Go to Maintenance menu follow by Pharmacy menu and click on the PN Source Content sub menu.

#### STEP 2

Search existing record by

- **Drug Name**
- **PN Type**

#### Note

There are two **PN Type**

- a) **TPN** : Total Parenteral Nutrition
- b) **PPN** : Peripheral Parenteral Nutrition

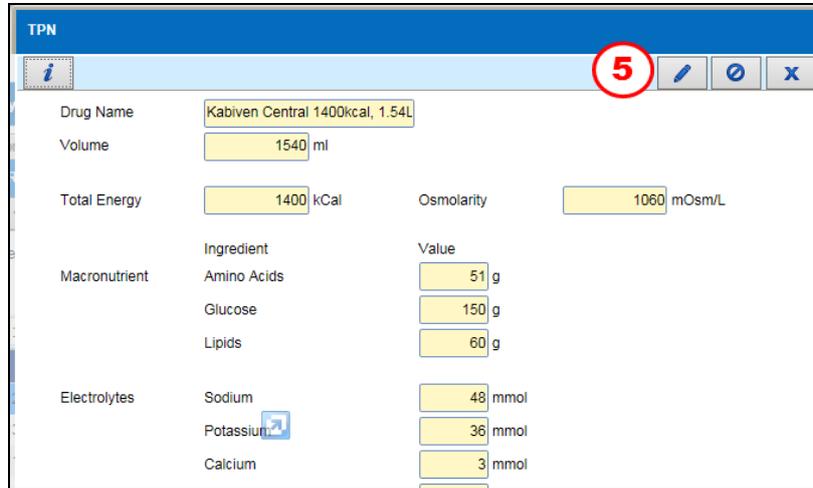
#### STEP 3

Click on the  button and system will display related record

#### STEP 4

Double click on record and system will display PN Dialog screen.

a) TPN

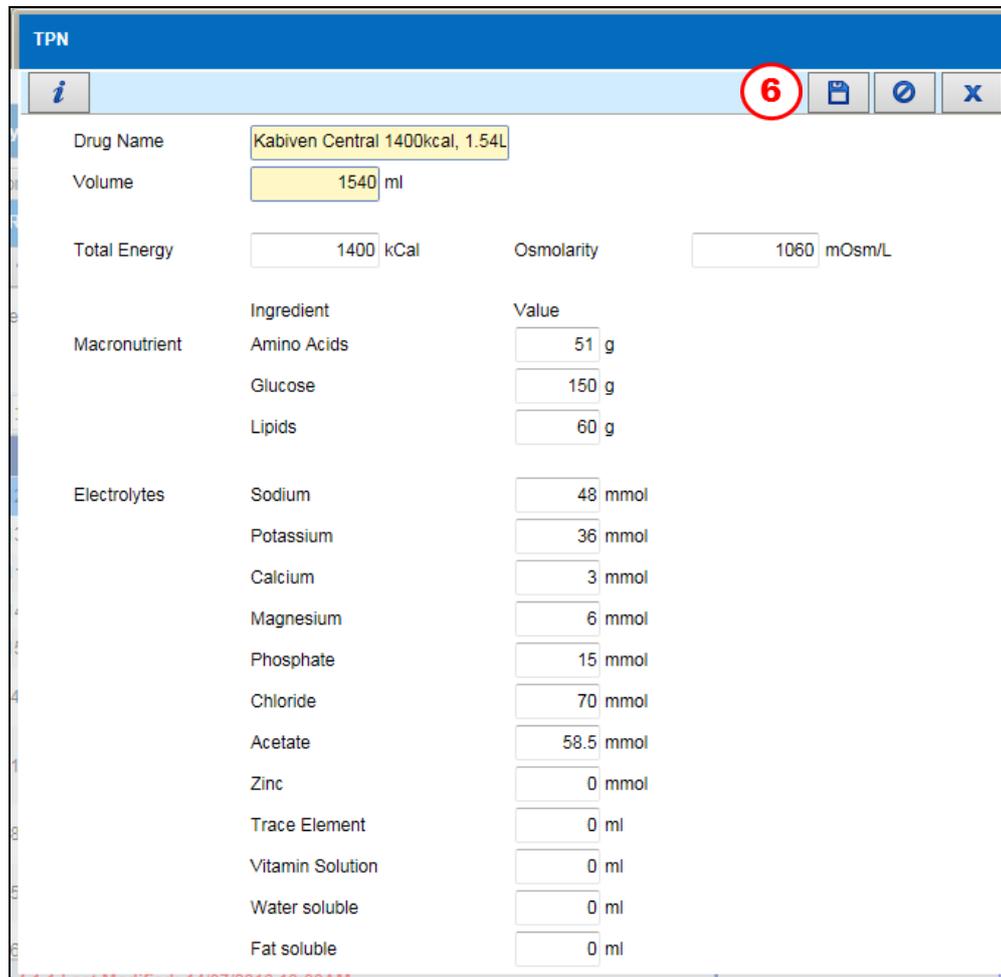


TPN		
Drug Name	Kabiven Central 1400kcal, 1.54L	
Volume	1540 ml	
Total Energy	1400 kCal	Osmolarity 1060 mOsm/L
Macronutrient	Ingredient	Value
	Amino Acids	51 g
	Glucose	150 g
	Lipids	60 g
Electrolytes	Sodium	48 mmol
	Potassium	36 mmol
	Calcium	3 mmol

Figure 3.13-2 TPN

STEP 5

Click on the  button to edit the record



TPN		
Drug Name	Kabiven Central 1400kcal, 1.54L	
Volume	1540 ml	
Total Energy	1400 kCal	Osmolarity 1060 mOsm/L
Macronutrient	Ingredient	Value
	Amino Acids	51 g
	Glucose	150 g
	Lipids	60 g
Electrolytes	Sodium	48 mmol
	Potassium	36 mmol
	Calcium	3 mmol
	Magnesium	6 mmol
	Phosphate	15 mmol
	Chloride	70 mmol
	Acetate	58.5 mmol
	Zinc	0 mmol
	Trace Element	0 ml
	Vitamin Solution	0 ml
	Water soluble	0 ml
Fat soluble	0 ml	

Figure 3.13-3 TPN

**Note**

User is allowing to edit:

- **Total Energy**
- **Osmolarity**
- **Macronutrient**
  - **Amino Acids**
  - **Glucose**
  - **Lipids**
- **Electrolytes**
  - **Sodium**
  - **Potassium**
  - **Calcium**
  - **Magnesium**
  - **Phosphate**
  - **Chloride**
  - **Acetate**
  - **Zink**
  - **Trace Elements**
  - **Vitamin Solution**
  - **Water Soluble**
  - **Fat Soluble**

**STEP 6**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.13-4

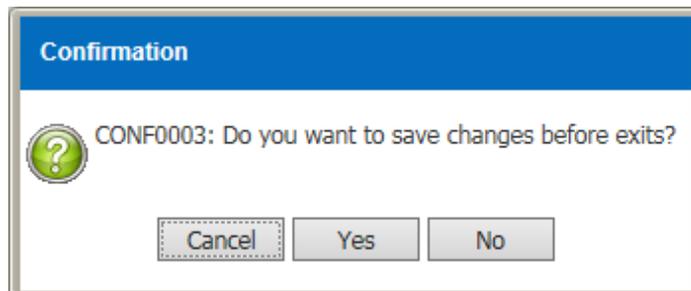
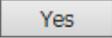
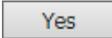


Figure 3.13-4 Confirmation Message

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.13-5

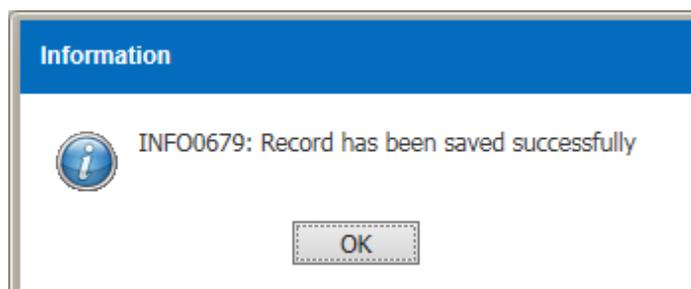
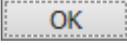
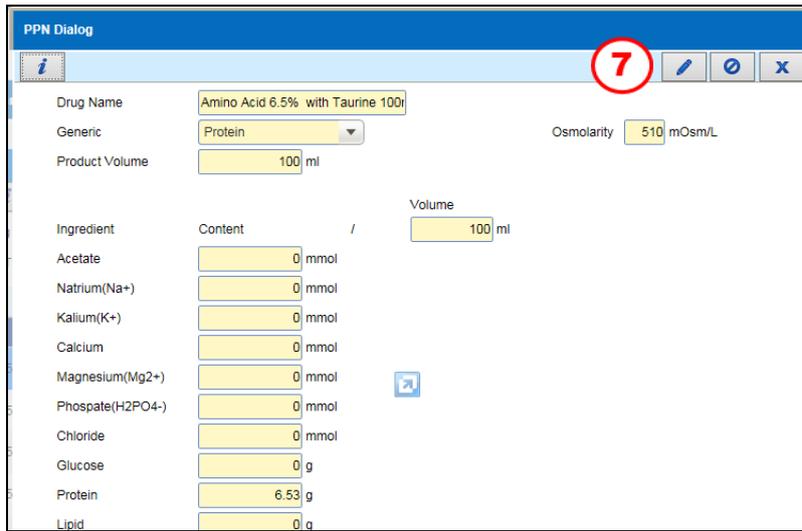


Figure 3.13-5 Information Message

- Click on the  button to confirmed the edited record

a) PPN



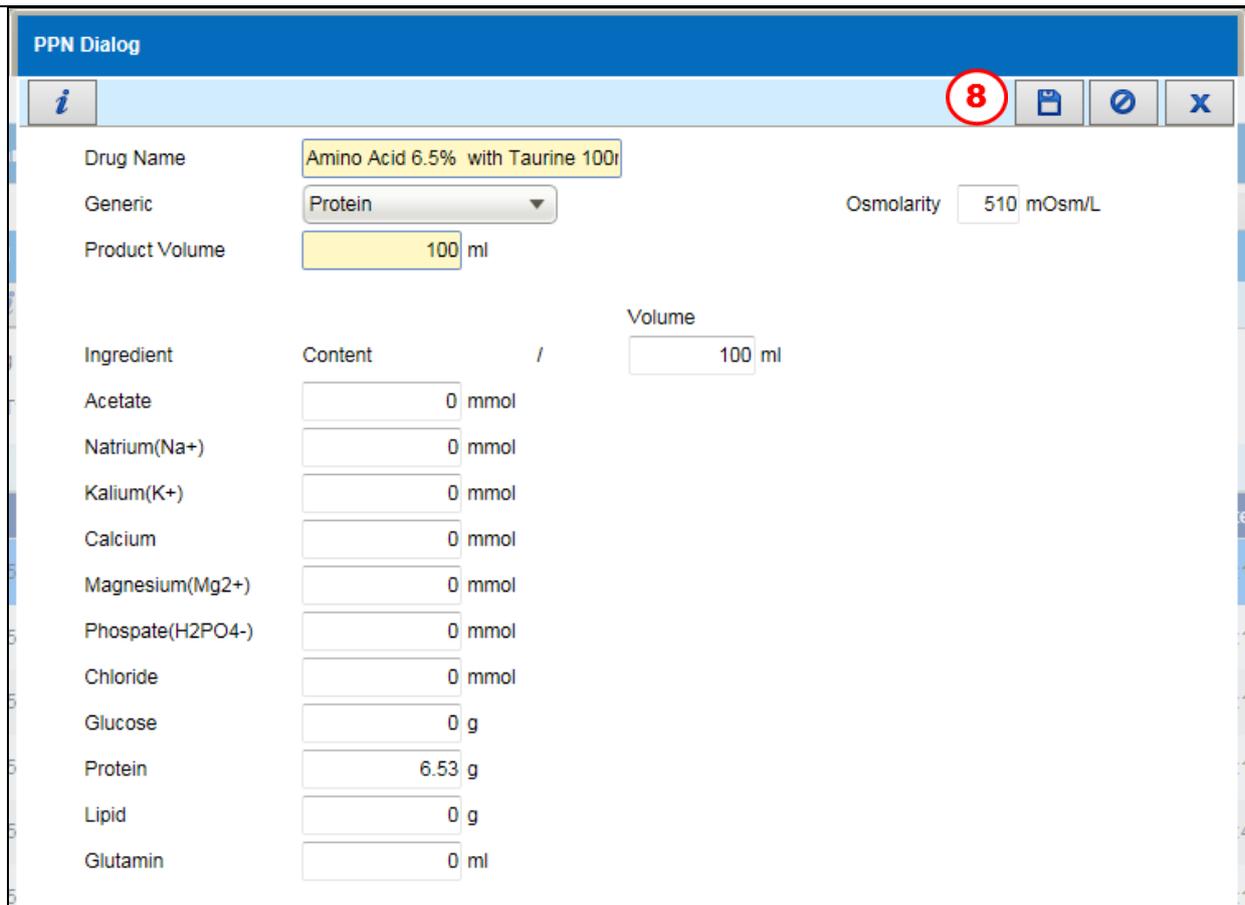
The PPN Dialog window displays the following information:

Field	Value
Drug Name	Amino Acid 6.5% with Taurine 100l
Generic	Protein
Product Volume	100 ml
Osmolarity	510 mOsm/L
Ingredient	Content / Volume
Acetate	0 mmol / 100 ml
Sodium(Na+)	0 mmol / 100 ml
Potassium(K+)	0 mmol / 100 ml
Calcium	0 mmol / 100 ml
Magnesium(Mg2+)	0 mmol / 100 ml
Phosphate(H2PO4-)	0 mmol / 100 ml
Chloride	0 mmol / 100 ml
Glucose	0 g / 100 ml
Protein	6.53 g / 100 ml
Lipid	0 g / 100 ml

Figure 3.13-6 PPN Dialog

**STEP 7**

Click on the  button to edit the record



Ingredient	Content	Volume
Acetate	0 mmol	100 ml
Natrium(Na+)	0 mmol	
Kalium(K+)	0 mmol	
Calcium	0 mmol	
Magnesium(Mg2+)	0 mmol	
Phospate(H2PO4-)	0 mmol	
Chloride	0 mmol	
Glucose	0 g	
Protein	6.53 g	
Lipid	0 g	
Glutamin	0 ml	

Figure 3.13-7 PPN Dialog

**Note**

User is allowing to edit:

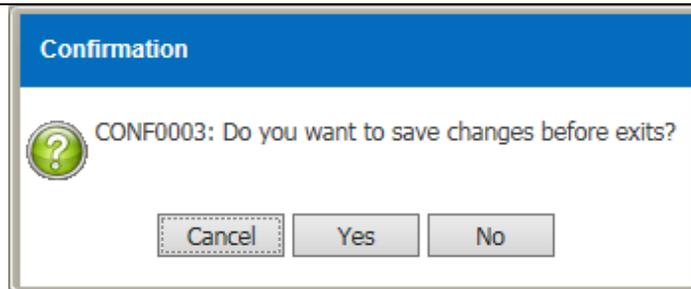
- **Generic**
- **Osmolarity**
- **Acetate**
- **Natrium(Na+)**
- **Kalium(K+)**
- **Calcium**
- **Magnesium(Mg2+)**
- **Phospate(H2PO4-)**
- **Chloride**
- **Glucose**
- **Protein**
- **Lipid**
- **Glutamin**

**STEP 8**

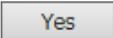
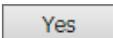
Click on the  button to save the edited record

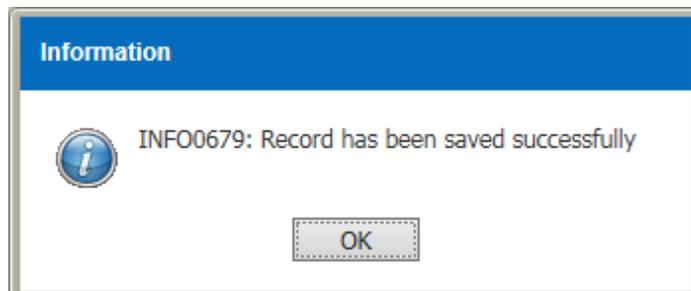
**Note**

- System will display a Confirmation Message as Figure 3.13-8



**Figure 3.13-8 Confirmation Message**

- Click on the  button to save the edited record
- Information Message will display after click on the  button as Figure 3.13-9



**Figure 3.13-9 Information Message**

Click on the  button to confirmed the edited record

### 3.14 Radiopharma Therapy

#### 3.14.1 Create New Radiopharma Therapy

To create new record for Radiopharma Therapy, perform the steps below:

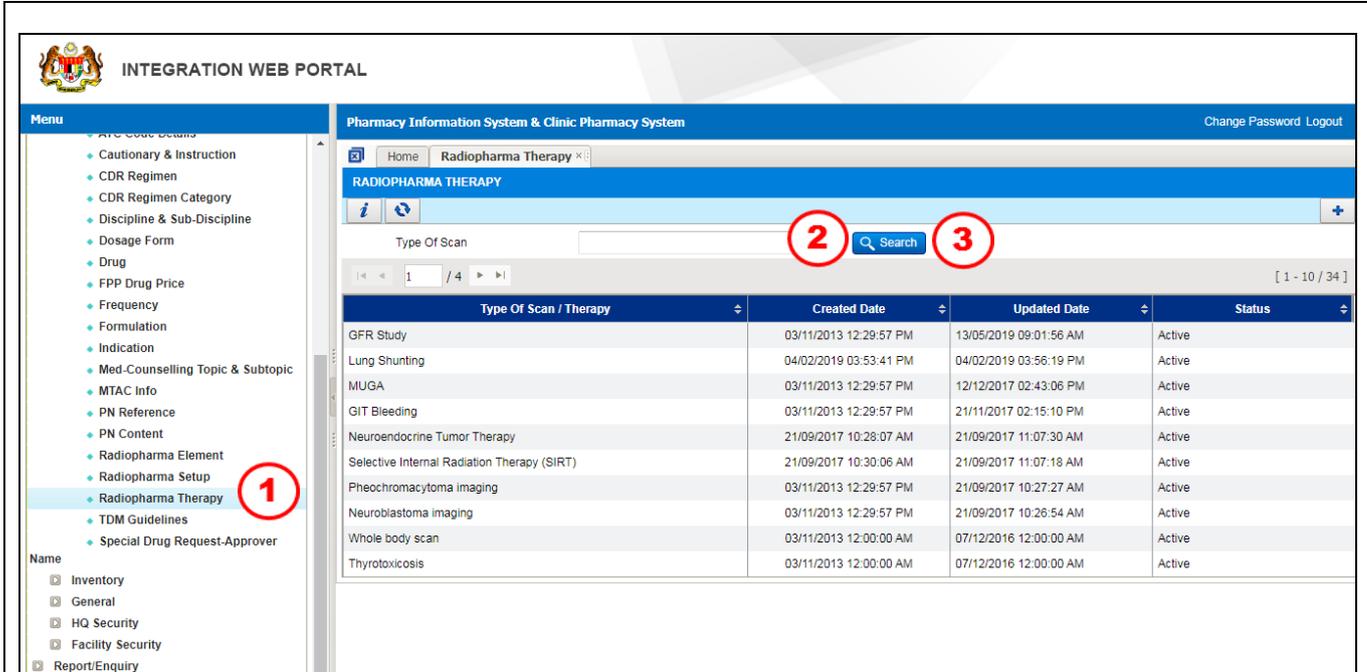


Figure 3.14.1-1 Therapy Linked Radiopharma Listing Page

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Radiopharma Therapy'

#### STEP 2

Search existing record by entering *Type Of Scan*

#### STEP 3

Click on the button and system will display the related record

#### Note

User is allowing to view the information by click on the related record and information will be displayed as Figure 3.14.1-2

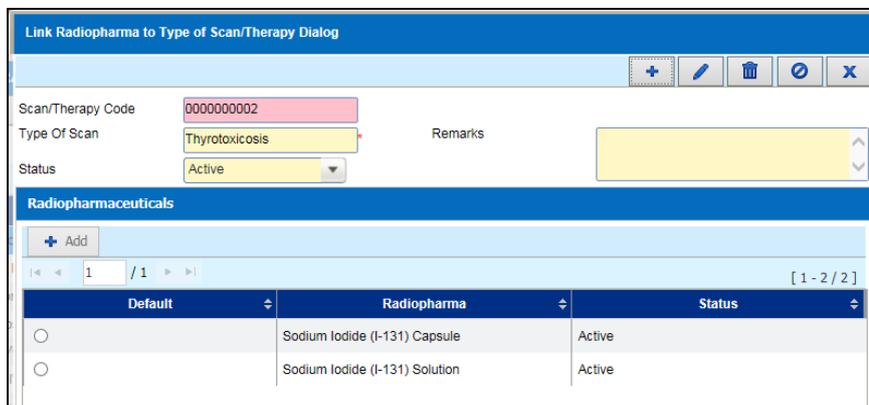


Figure 3.14.1-2 Link Radiopharma to Type of Scan/Therapy Dialog

**Note**

Click on the button to close the screen

INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Menu

- PKD Authorization
- Contract
- KPK Approval
- Budget
- Maintenance
  - Pharmacy
    - Administration Route
    - Frequency
    - Dosage Form
    - Active Ingredient
    - ATC Code Details
    - Cautionary & Instruction
    - Indication
    - Drug
    - CDR Regimen
    - CDR Regimen Category
    - Discipline & Sub-Discipline
      - PN Constituents
  - Reference Range
    - PN Source Content
      - Therapy linked
  - Radiopharma
    - Radiopharma Element
    - Radiopharma Setup
    - TDM Guidelines

THERAPY LINKED RADIOPHARMA

Type Of Scan  Search

[ 1 - 10 / 31 ]

Type Of Scan / Therapy	Created Date	Updated Date	Status
Whole body scan	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Thyrotoxicosis	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Ablation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Dacryoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lung VQ Ventilation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Meckel's Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Parathyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Thyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lymphoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Localization of inflammatory lesion (WBC Scan)	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active

Figure 3.14.1-3 Therapy Linked Radiopharma

**STEP 4**

Click on the button to create a new record and Link Radiopharma to Type of Scan/Therapy Dialog will be displayed as Figure 3.14.1-4

Link Radiopharma to Type of Scan/Therapy Dialog

Scan/Therapy Code

Type Of Scan  Remarks

Status

Radiopharmaceuticals

+ Add

[ 1 / 1 ]

Default	Radiopharma	Status
No Records Found!		

Figure 3.14.1-4 Link Radiopharma to Type of Scan/Therapy Dialog

**STEP 5**

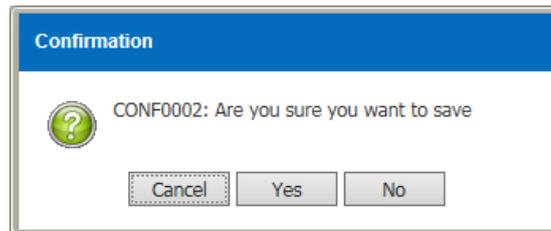
Enter **Type Of Scan**

**STEP 6**

Click on the button to save the record

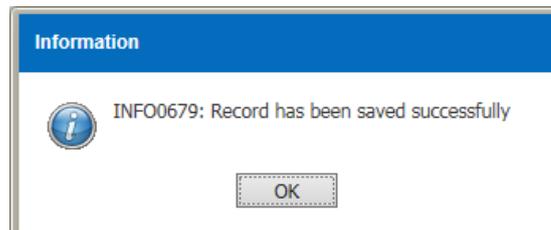
**Note**

- System will display a Confirmation Message as Figure 3.14.1-5
- Click on the  button to save the transaction
- Click on the  or  button to cancel the saved record



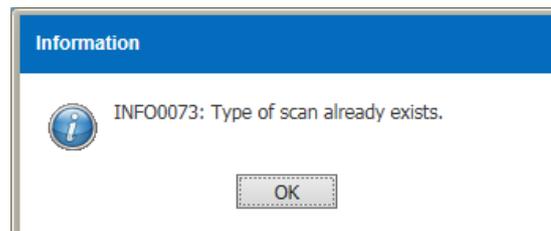
**Figure 3.14.1-5 Confirmation Message**

- Information Message will display after click on the  button as Figure 3.14.1-6
- Click on the  button to confirmed the save transaction and Scan/Therapy Code will generated for future reference



**Figure 3.14.1-6 Information Message**

- System will display an Information Message if **Type Of Scan** already exists as Figure 3.14.1-7



**Figure 3.14.1-7 Information Message**

- Click on the  button

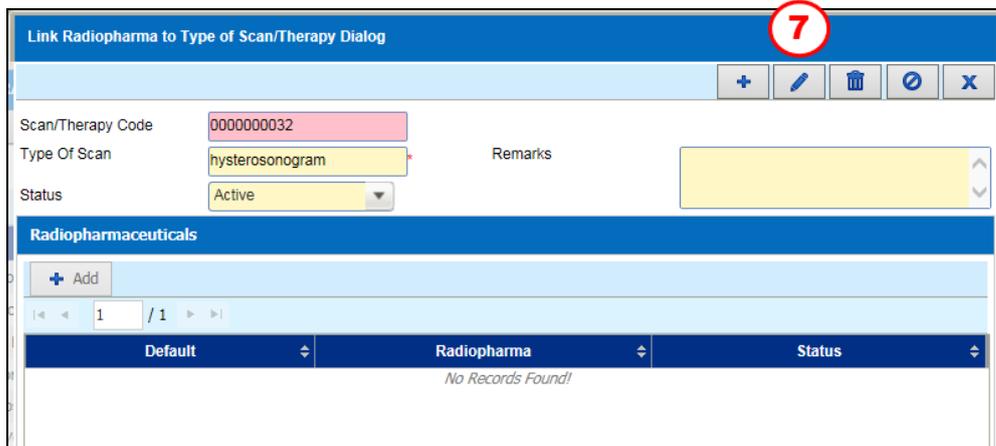


Figure 3.14.1-8 Link Radiopharma to Type of Scan/therapy Dialog

**STEP 7**

Click on the  button to edit the record

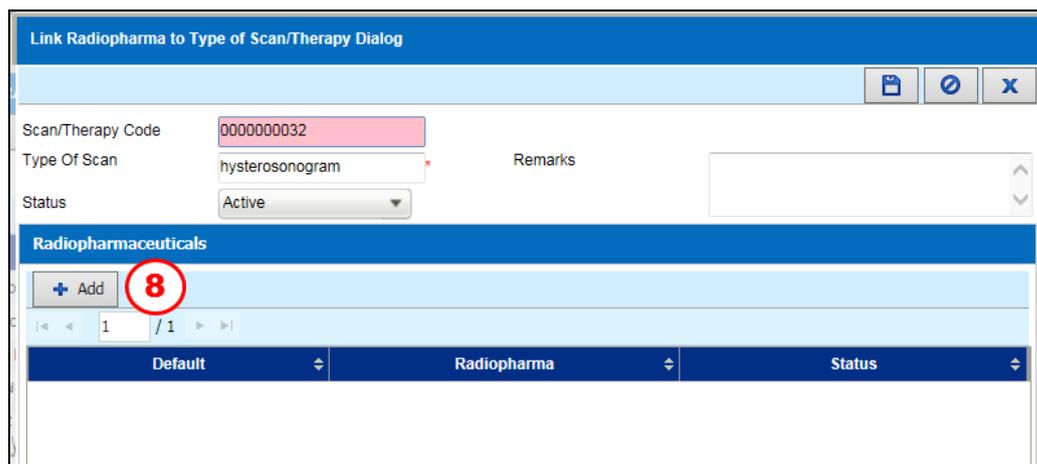


Figure 3.14.1-9 Link Radiopharma to Type of Scan/therapy Dialog

**STEP 8**

Click on the  button and Radiopharmaceuticals screen will be display as Figure 3.14.1-10

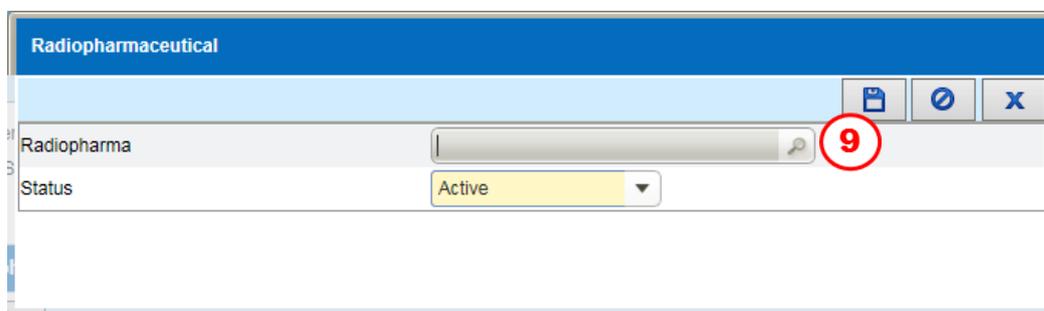
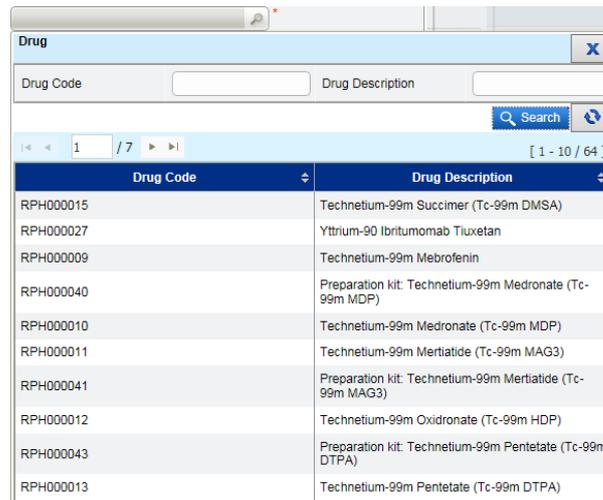


Figure 3.14.1-10 Radiopharmaceutical

**STEP 9**

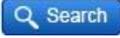
Click on the **Radiopharma**  and Drug window will be displayed as Figure 3.14.1-11



Drug Code	Drug Description
RPH000015	Technetium-99m Succimer (Tc-99m DMSA)
RPH000027	Yttrium-90 Ibritumomab Tiuxetan
RPH000009	Technetium-99m Mebrofenin
RPH000040	Preparation kit: Technetium-99m Medronate (Tc-99m MDP)
RPH000010	Technetium-99m Medronate (Tc-99m MDP)
RPH000011	Technetium-99m Mertiatide (Tc-99m MAG3)
RPH000041	Preparation kit: Technetium-99m Mertiatide (Tc-99m MAG3)
RPH000012	Technetium-99m Oxidronate (Tc-99m HDP)
RPH000043	Preparation kit: Technetium-99m Pentetate (Tc-99m DTPA)
RPH000013	Technetium-99m Pentetate (Tc-99m DTPA)

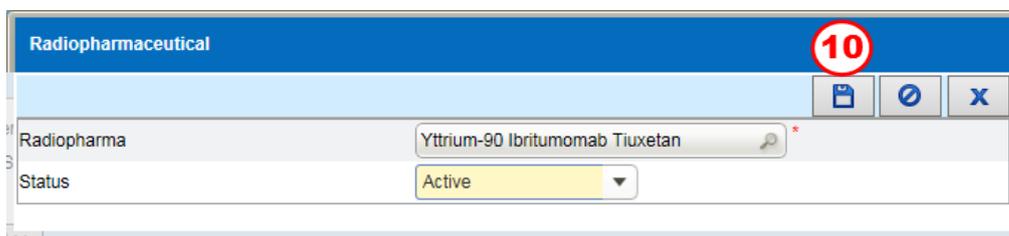
Figure 3.14.1-11 Drug

**Note**

- User is allowed to enter partially or fully searching criteria for **Drug Code** and **Drug Description**. Then click on the  button

**Note**

- Double click on the selected **Drug Code**



**Radiopharmaceutical** 10

Radiopharma: Yttrium-90 Ibritumomab Tiuxetan

Status: Active

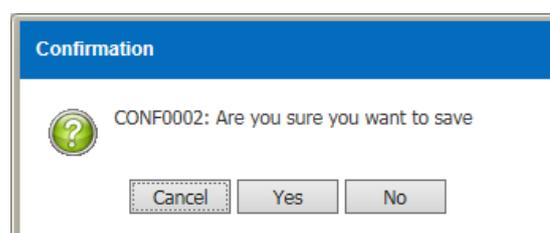
Figure 3.14.1-12 Radiopharmaceutical

**STEP 10**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.14.1-13
- Click on the  button to save the transaction
- Click on the  or  button to cancel the saved record



**Confirmation**

CONF0002: Are you sure you want to save

Figure 3.14.1-13 Confirmation Message

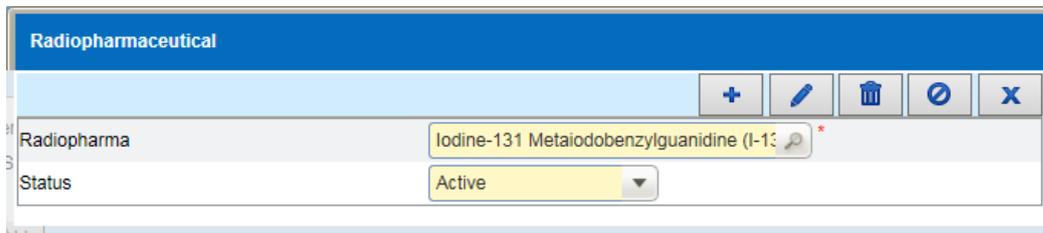
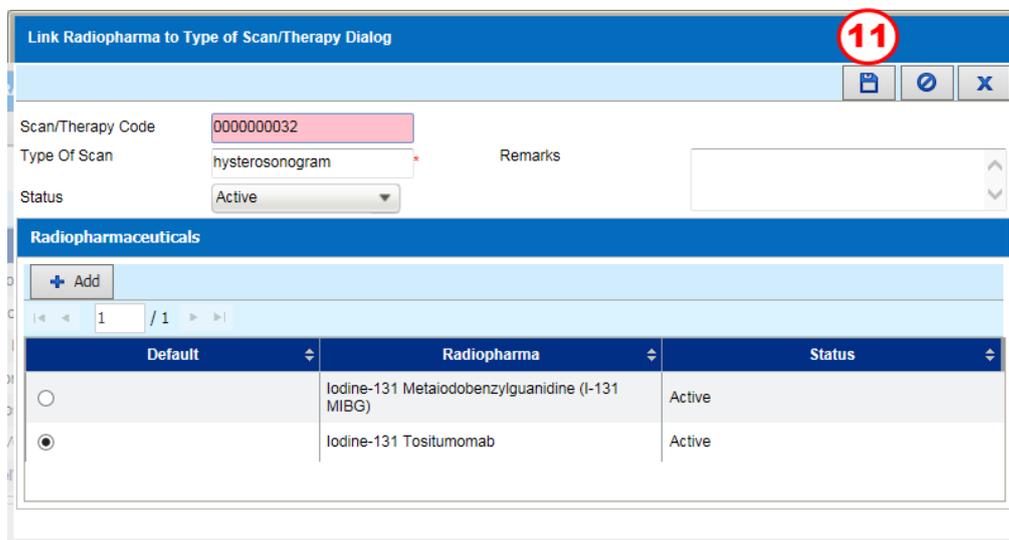


Figure 3.14.1-14 Radiopharmaceutical

**Note**

- User is allow to add more drug by click on the  button and follow **STEP 9** to **STEP 10**.
- Click on the  button to close the screen.



Default	Radiopharma	Status
<input type="radio"/>	Iodine-131 Metaiodobenzylguanidine (I-131 MIBG)	Active
<input checked="" type="radio"/>	Iodine-131 Tositumomab	Active

Figure 3.14.1-15 Link Radiopharma to Type of Scan/therapy Dialog

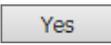
**Note**

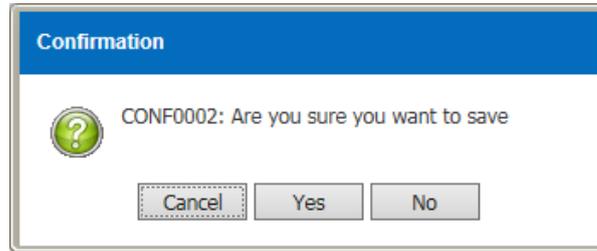
If there is more than 1 drug under Radiopharmaceuticals, user is allow to set default drug by click on  button

**STEP 11**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.14.1-16
- Click on the  button to save the record



**Figure 3.14.1-16 Confirmation Message**

### 3.14.2 Modify Radiopharma Therapy

To modify Radiopharma Therapy records, perform the steps below:

Type Of Scan / Therapy	Created Date	Updated Date	Status
Whole body scan	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Thyrototoxicosis	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Ablation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Dacryoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lung V/Q Ventilation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Meckel's Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Parathyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Thyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lymphoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Localization of inflammatory lesion (WBC Scan)	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active

Figure 3.14.2-1 Therapy Linked Radiopharma Listing Page

**STEP 1**

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Radiopharma Therapy'

**STEP 2**

Search existing record by entering **Type Of Scan**

**STEP 3**

Click on the button and system will display related record

**STEP 4**

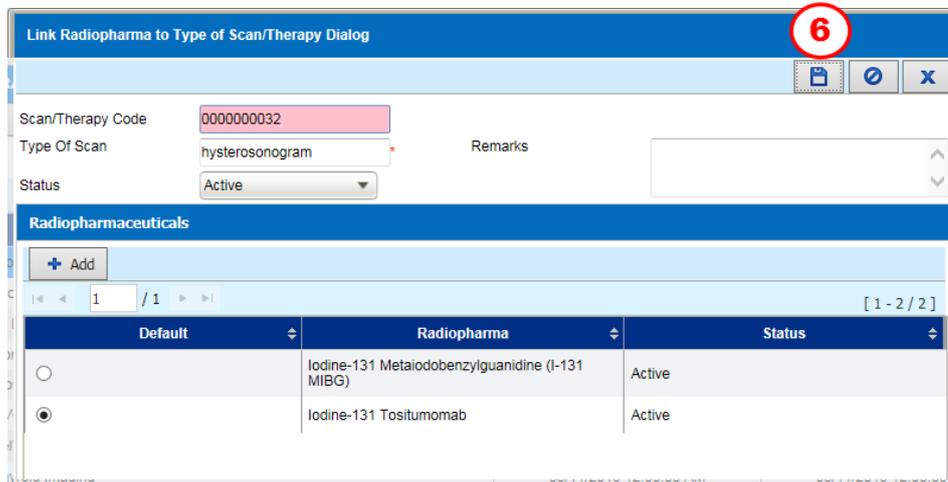
Click on the selected record

Default	Radiopharma	Status
<input type="radio"/>	Iodine-131 Metaiodobenzylguanidine (I-131 MIBG)	Active
<input checked="" type="radio"/>	Iodine-131 Tositumomab	Active

Figure 3.14.2-2 Link Radiopharma to Type of Scan/Therapy Dialog

### STEP 5

Click on the  button to edit the record



Default	Radiopharma	Status
<input type="radio"/>	Iodine-131 Metaiodobenzylguanidine (I-131 MIBG)	Active
<input checked="" type="radio"/>	Iodine-131 Tosiumomab	Active

Figure 3.14.2-3 Link Radiopharma to Type of Scan/Therapy Dialog

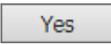
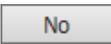
### Note

- User is allowing to edit:
  - **Type Of Scan**
  - **Status**
  - **Radiopharma Drug**

### STEP 6

Click on the  button to save the edited record

### Note

- System will display a Confirmation Message as Figure 3.14.2-4
- Click on the  button to save the edited record
- Click on the  or  button to cancel the edited record

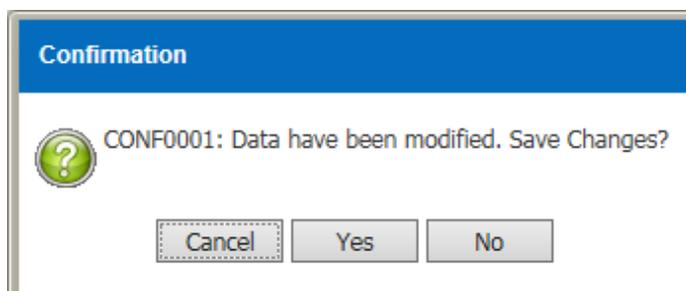


Figure 3.14.2-4 Confirmation Message

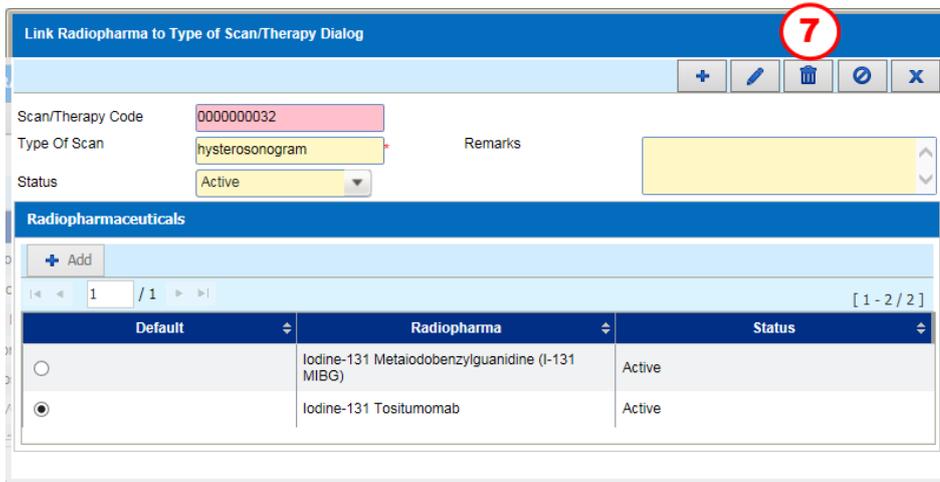
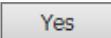


Figure 3.14.2-5 Link Radiopharma to Type of Scan/Therapy Dialog

**STEP 7**

Click on the  button to delete the record

**Note**

- System will display a Confirmation Message as Figure 3.14.2-6
- Click on the  button to delete the record

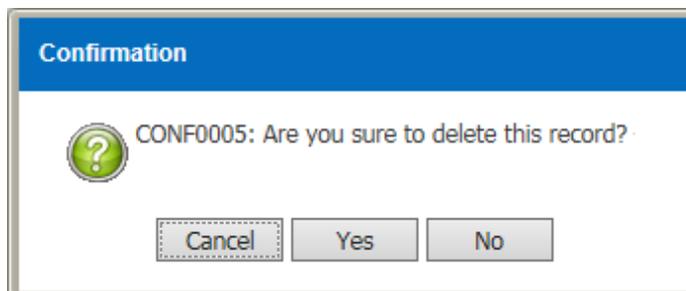


Figure 3.14.2-6 Confirmation Message

- The status of the record will be **Inactive** as figure 3.14.2-7

**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System Change Password Logout

Home Therapy linked Radiopharma

**THERAPY LINKED RADIOPHARMA**

Type Of Scan

1 / 4 [ 1 - 10 / 32 ]

Type Of Scan / Therapy	Created Date	Updated Date	Status
hysterosonogram	06/10/2016 12:00:00 AM	06/10/2016 12:00:00 AM	Inactive
Thyrototoxicosis	03/11/2013 12:00:00 AM	05/10/2016 12:00:00 AM	Active
Whole body scan	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Ablation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Dacryoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lung VQ Ventilation	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Meckel's Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Parathyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Thyroid Imaging	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active
Lymphoscintigraphy	03/11/2013 12:00:00 AM	03/11/2013 12:00:00 AM	Active

**Figure 3.14.2-7 Therapy Linked Radiopharma**

### 3.15 Radiopharma Element

#### 3.15.1 Create New Radiopharma Element

To create new record for Radiopharma Element, perform the steps below:

Element	Half Life	Unit	Created Date	Updated Date	Status
Fluorine-18	109.77	Minutes	23/04/2018 11:18:20 AM	23/04/2018 11:18:20 AM	Active
Yttrium-90	64.1	Hours	23/04/2018 11:15:50 AM	23/04/2018 11:15:50 AM	Active
Technetium-99m	6.01	Hours	03/11/2017 09:05:32 AM	03/11/2017 09:05:32 AM	Active
Iodine-131	8.02	Days	01/11/2017 04:35:05 PM	01/11/2017 04:35:05 PM	Active
Rhenium-186	3.71	Days	29/07/2016 04:05:24 PM	29/07/2016 04:05:24 PM	Active
Gallium-68	1.13	Hours	29/07/2016 04:04:21 PM	29/07/2016 04:04:21 PM	Active
Gallium-67	3.26	Hours	29/07/2016 04:04:08 PM	29/07/2016 04:04:08 PM	Active
Chromium-51	28	Days	29/07/2016 04:03:07 PM	29/07/2016 04:03:07 PM	Active
Cobalt-57	207.9	Days	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active
Cobalt-60	5.27	Years	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active

Figure 3.15.1-1 Radiopharma Element

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Radiopharma Element'

#### STEP 2

Search existing record by entering *Element*

#### STEP 3

Click on the Search button and system will display the related record

#### Note

User is allowing to view the information by click on the related record and information will be displayed as Figure 3.15.1-2

Drug Description	Status
Technetium-99m Sulfur Colloid	<input checked="" type="checkbox"/> Active
Technetium-99m Tetrofosmin	<input checked="" type="checkbox"/> Active

Figure 3.15.1-2 Radiopharma Element + Half Life

**Note**

Click on the button to close the screen

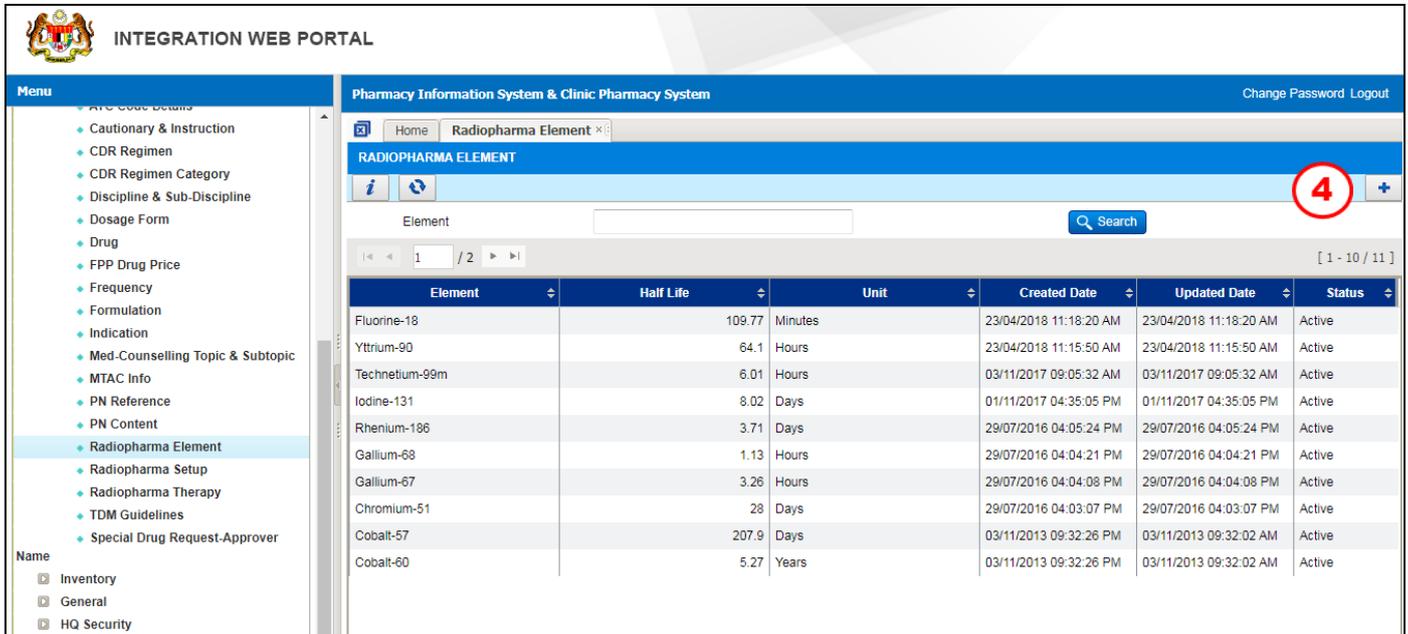


Figure 3.15.1-3 Radiopharma Element

**STEP 4**

Click on the button to create a new record and Radiopharma Element + Half Life screen will be displayed as Figure 3.15.1-4

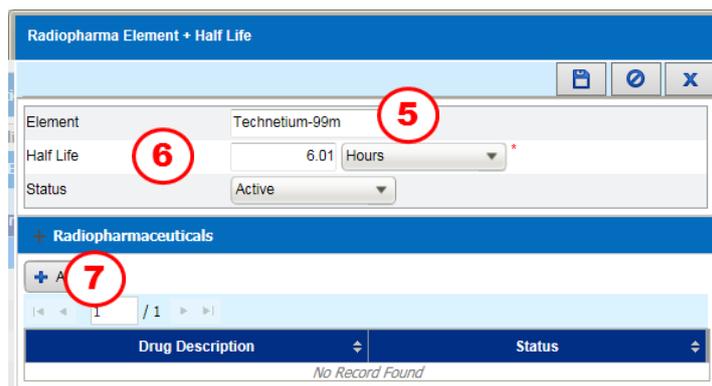


Figure 3.15.1-4 Radiopharma Element + Half Life

**STEP 5**

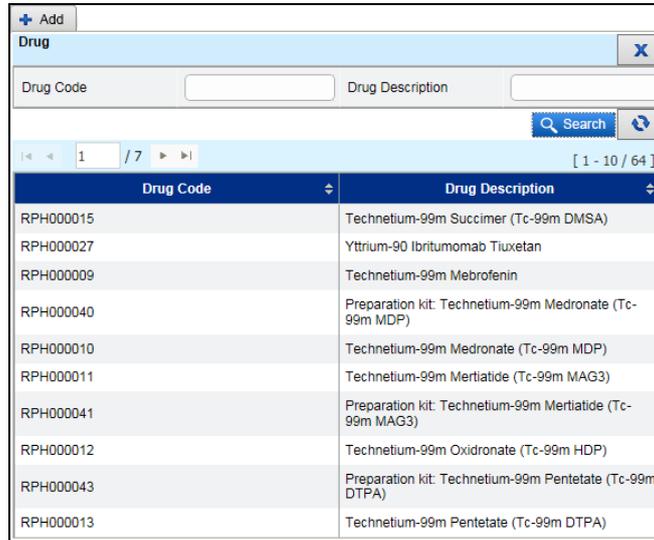
Enter **Element**

**STEP 6**

Enter **Half Life** and select the interval between **Days/Hours/Minutes/Months/Seconds/Years**

**STEP 7**

Click on the button and Drug window will be displayed as Figure 3.15.1-5

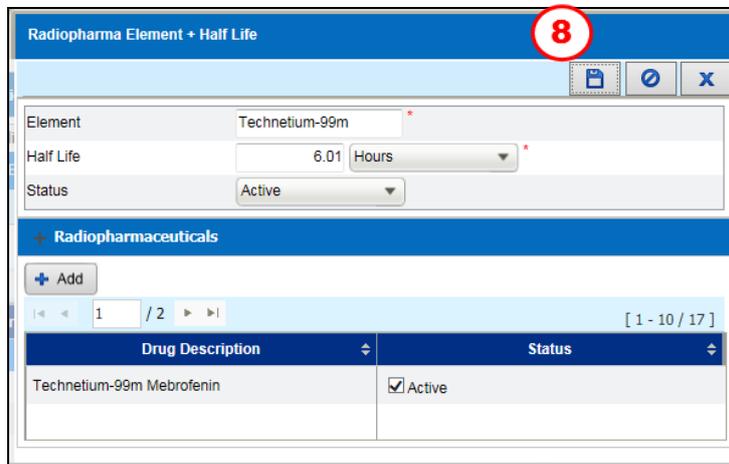


Drug Code	Drug Description
RPH000015	Technetium-99m Succimer (Tc-99m DMSA)
RPH000027	Yttrium-90 Ibritumomab Tiuxetan
RPH000009	Technetium-99m Mebrofenin
RPH000040	Preparation kit: Technetium-99m Medronate (Tc-99m MDP)
RPH000010	Technetium-99m Medronate (Tc-99m MDP)
RPH000011	Technetium-99m Mertiatide (Tc-99m MAG3)
RPH000041	Preparation kit: Technetium-99m Mertiatide (Tc-99m MAG3)
RPH000012	Technetium-99m Oxidronate (Tc-99m HDP)
RPH000043	Preparation kit: Technetium-99m Pentetate (Tc-99m DTPA)
RPH000013	Technetium-99m Pentetate (Tc-99m DTPA)

Figure 3.15.1-5 Drug

**Note**

- User is allowed to enter partially or fully searching criteria for **Drug Code** and **Drug Description**. Then click on the  button
- Double click on the selected **Drug Code**



**Radiopharma Element + Half Life** 8

Element: Technetium-99m \*

Half Life: 6.01 Hours \*

Status: Active

**Radiopharmaceuticals**



Drug Description	Status
Technetium-99m Mebrofenin	<input checked="" type="checkbox"/> Active

Figure 3.15.1-6 Radiopharma Element + Half Life

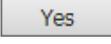
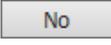
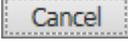
**Note**

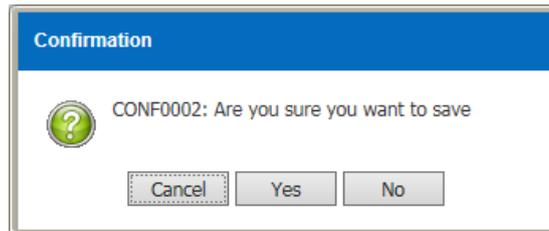
- User is allow to add more drug by click on the  button and follow **STEP 7**.

**STEP 8**

Click on the  button to save the record

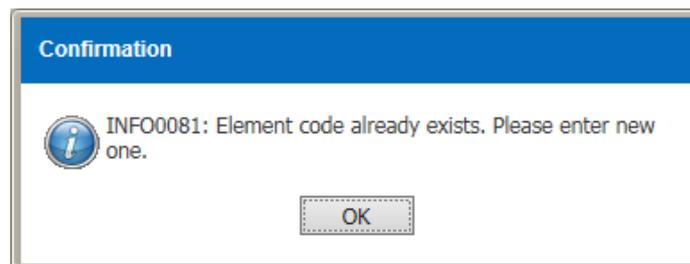
**Note**

- System will display a Confirmation Message as Figure 3.15.1-7
- Click on the  button to save the transaction
- Click on the  or  button to cancel the saved record



**Figure 3.15.1-7 Confirmation Message**

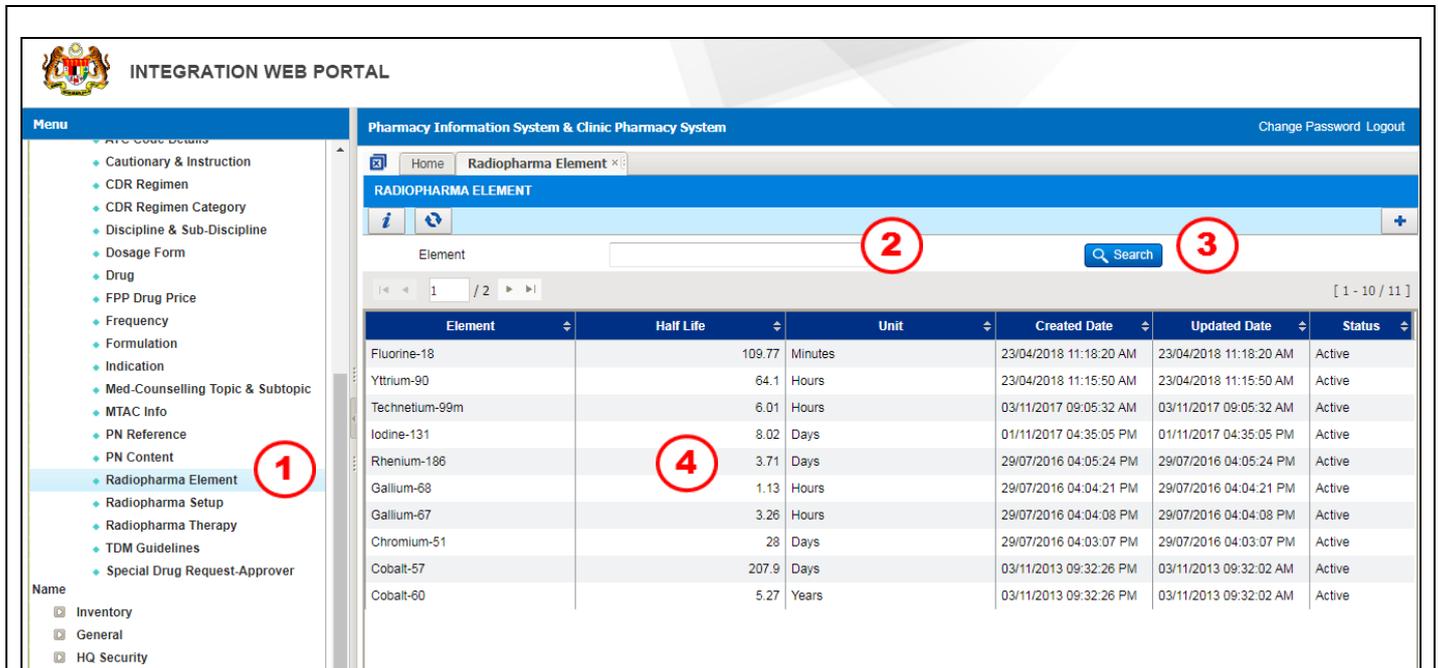
- System will display an Information Message if **Element Code** already exists as Figure 3.15.1-8



**Figure 3.15.1-8 Information Message**

### 3.15.2 Modify Radiopharma Element

To modify record for Radiopharma Element, perform the steps below:



**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Radiopharma Element

**RADIOPHARMA ELEMENT**

Element  Search

1 / 2 [ 1 - 10 / 11 ]

Element	Half Life	Unit	Created Date	Updated Date	Status
Fluorine-18	109.77	Minutes	23/04/2018 11:18:20 AM	23/04/2018 11:18:20 AM	Active
Yttrium-90	64.1	Hours	23/04/2018 11:15:50 AM	23/04/2018 11:15:50 AM	Active
Technetium-99m	6.01	Hours	03/11/2017 09:05:32 AM	03/11/2017 09:05:32 AM	Active
Iodine-131	8.02	Days	01/11/2017 04:35:05 PM	01/11/2017 04:35:05 PM	Active
Rhenium-186	3.71	Days	29/07/2016 04:05:24 PM	29/07/2016 04:05:24 PM	Active
Gallium-68	1.13	Hours	29/07/2016 04:04:21 PM	29/07/2016 04:04:21 PM	Active
Gallium-67	3.26	Hours	29/07/2016 04:04:08 PM	29/07/2016 04:04:08 PM	Active
Chromium-51	28	Days	29/07/2016 04:03:07 PM	29/07/2016 04:03:07 PM	Active
Cobalt-57	207.9	Days	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active
Cobalt-60	5.27	Years	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active

Figure 3.15.2-1 Radiopharma Element

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Radiopharma Element'

#### STEP 2

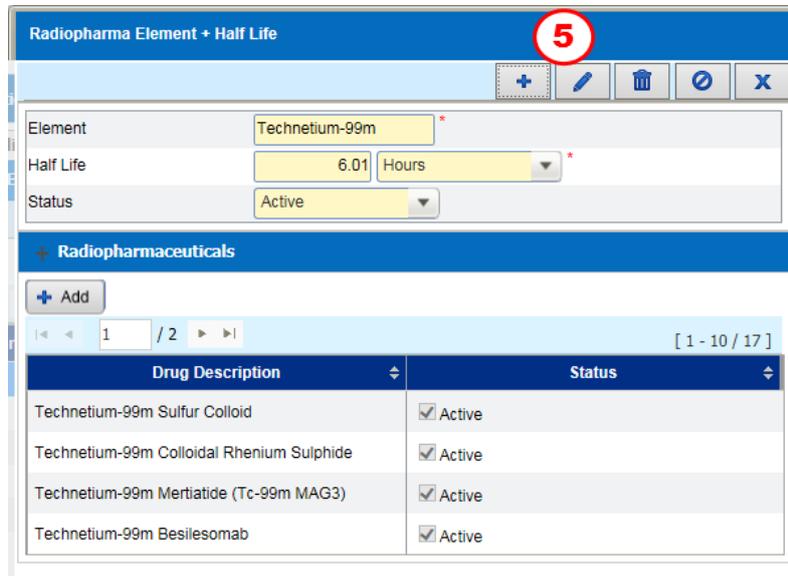
Search existing record by entering *Element*

#### STEP 3

Click on the  button and system will display the related record

#### STEP 4

Click on the selected record



**Radiopharma Element + Half Life**

Element: Technetium-99m \*

Half Life: 6.01 Hours \*

Status: Active

**+ Radiopharmaceuticals**

+ Add

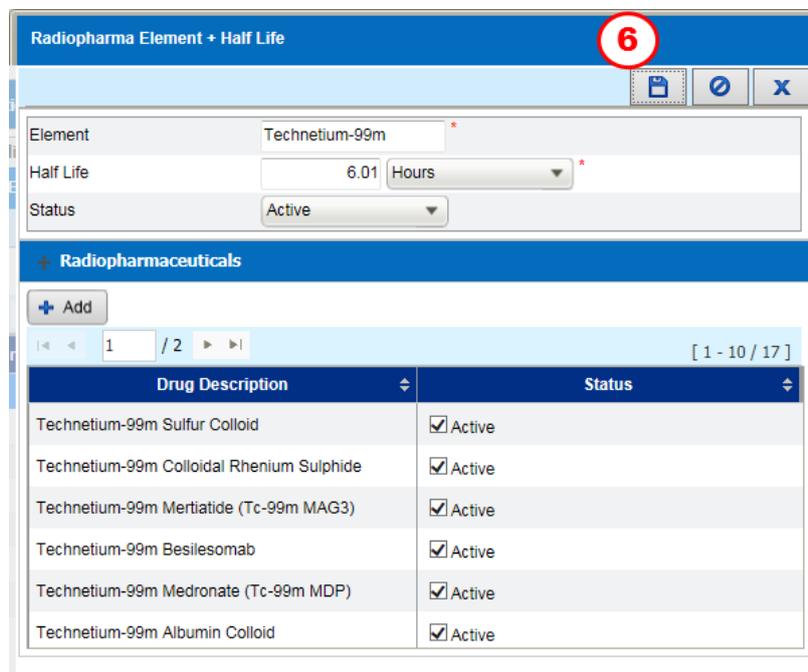
1 / 2 [ 1 - 10 / 17 ]

Drug Description	Status
Technetium-99m Sulfur Colloid	<input checked="" type="checkbox"/> Active
Technetium-99m Colloidal Rhenium Sulphide	<input checked="" type="checkbox"/> Active
Technetium-99m Mertiatile (Tc-99m MAG3)	<input checked="" type="checkbox"/> Active
Technetium-99m Besilesomab	<input checked="" type="checkbox"/> Active

**Figure 3.15.2-2 Radiopharma Element + Half Life**

**STEP 5**

Click on the  button to edit the record



**Radiopharma Element + Half Life**

Element: Technetium-99m \*

Half Life: 6.01 Hours \*

Status: Active

**+ Radiopharmaceuticals**

+ Add

1 / 2 [ 1 - 10 / 17 ]

Drug Description	Status
Technetium-99m Sulfur Colloid	<input checked="" type="checkbox"/> Active
Technetium-99m Colloidal Rhenium Sulphide	<input checked="" type="checkbox"/> Active
Technetium-99m Mertiatile (Tc-99m MAG3)	<input checked="" type="checkbox"/> Active
Technetium-99m Besilesomab	<input checked="" type="checkbox"/> Active
Technetium-99m Medronate (Tc-99m MDP)	<input checked="" type="checkbox"/> Active
Technetium-99m Albumin Colloid	<input checked="" type="checkbox"/> Active

**Figure 3.15.2-3 Radiopharma Element + Half Life**

**Note**

- User is allowing to edit:
  - **Element**
  - **Half Life**
  - **Status**
  - **Radiopharma Drug**

### STEP 6

Click on the  button to save the edited record

#### Note

- System will display a Confirmation Message as Figure 3.15.2-4
- Click on the  button to save the edited record
- Click on the  or  button to cancel the edited record

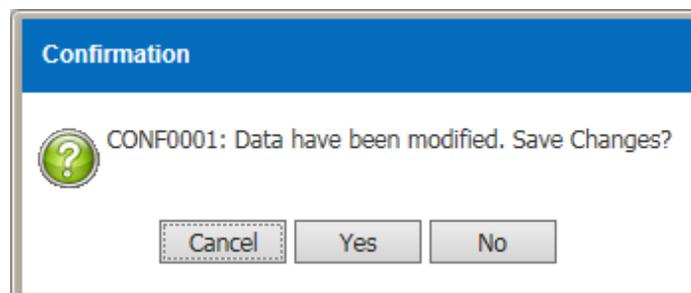


Figure 3.15.2-4 Confirmation Message

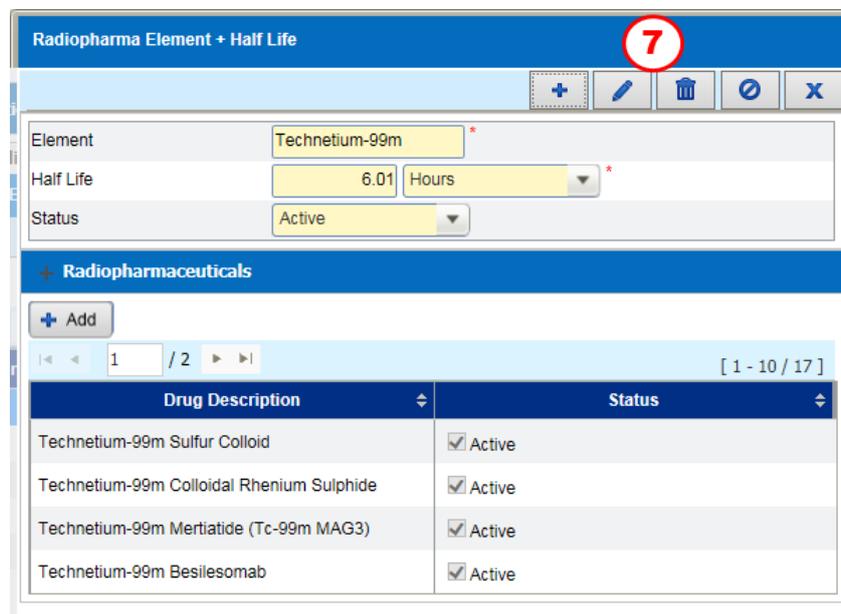


Figure 3.15.2-5 Radiopharma Element + Half Life

### STEP 7

Click on the  button to delete the record

#### Note

- System will display a Confirmation Message as Figure 3.15.2-6
- Click on the  button to delete the record

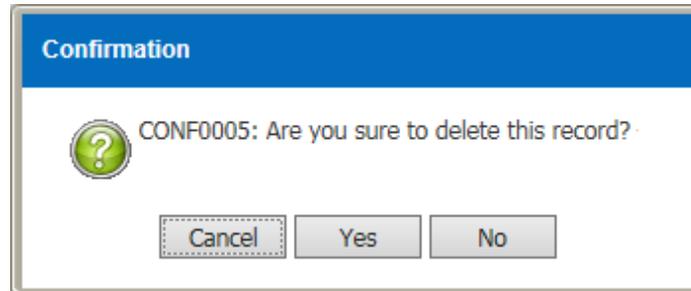
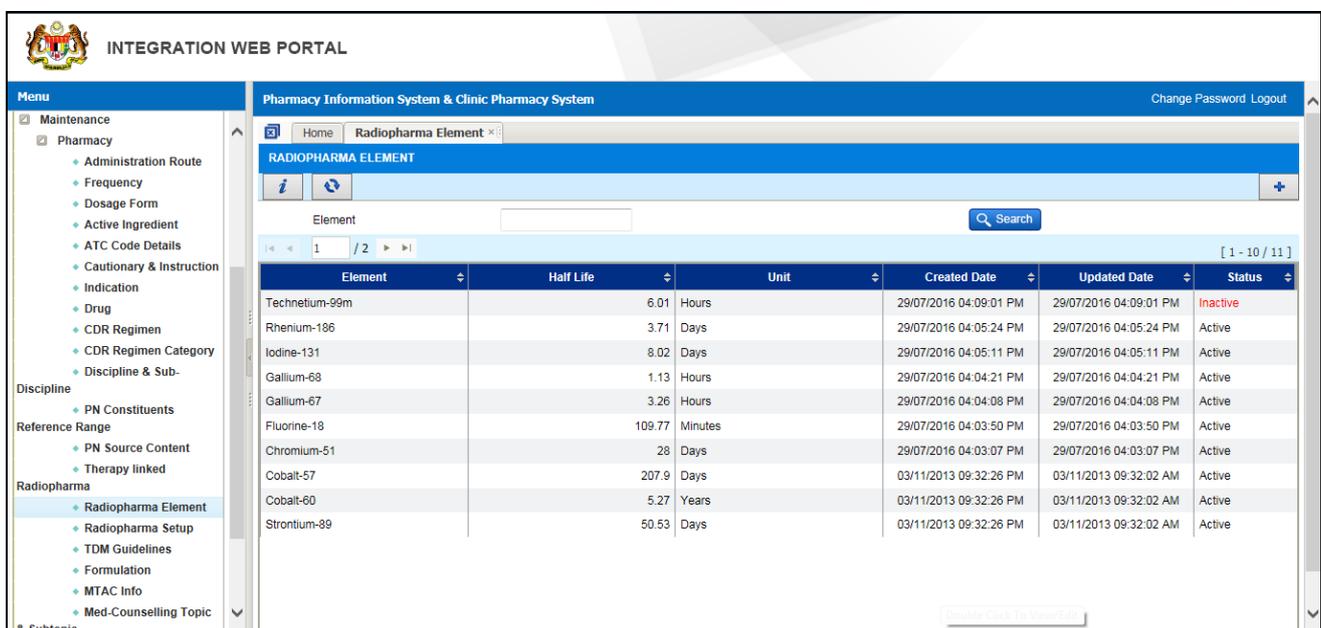


Figure 3.15.2-6 Confirmation Message

- The status of the record will be **Inactive** as figure 3.15.2-7



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Home Radiopharma Element

RADIOPHARMA ELEMENT

Element

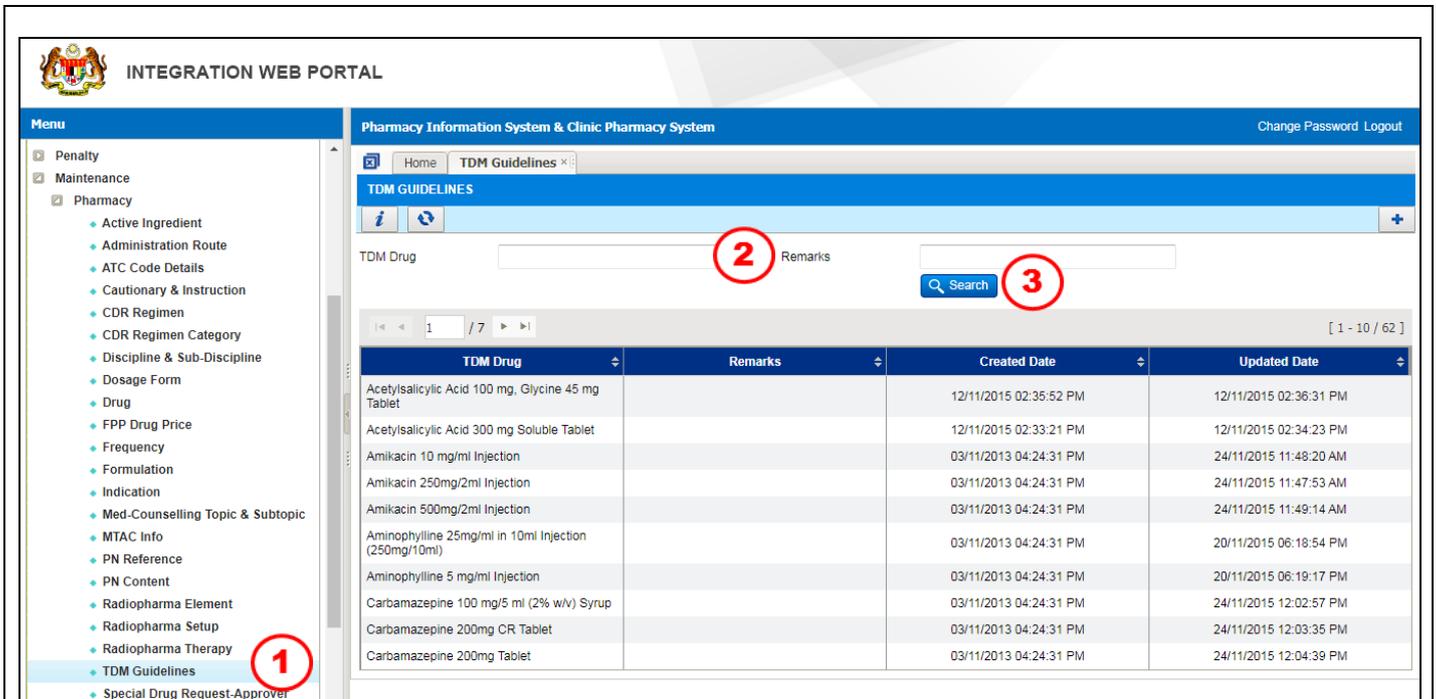
Element	Half Life	Unit	Created Date	Updated Date	Status
Technetium-99m	6.01	Hours	29/07/2016 04:09:01 PM	29/07/2016 04:09:01 PM	Inactive
Rhenium-186	3.71	Days	29/07/2016 04:05:24 PM	29/07/2016 04:05:24 PM	Active
Iodine-131	8.02	Days	29/07/2016 04:05:11 PM	29/07/2016 04:05:11 PM	Active
Gallium-68	1.13	Hours	29/07/2016 04:04:21 PM	29/07/2016 04:04:21 PM	Active
Gallium-67	3.26	Hours	29/07/2016 04:04:08 PM	29/07/2016 04:04:08 PM	Active
Fluorine-18	109.77	Minutes	29/07/2016 04:03:50 PM	29/07/2016 04:03:50 PM	Active
Chromium-51	28	Days	29/07/2016 04:03:07 PM	29/07/2016 04:03:07 PM	Active
Cobalt-57	207.9	Days	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active
Cobalt-60	5.27	Years	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active
Strontium-89	50.53	Days	03/11/2013 09:32:26 PM	03/11/2013 09:32:02 AM	Active

Figure 3.15.2-7 Radiopharma Element

### 3.16 TDM Guidelines

#### 3.16.1 Create New TDM Guideline

To create new record for TDM Guideline, perform the steps below:



The screenshot displays the 'INTEGRATION WEB PORTAL' interface. On the left is a 'Menu' sidebar with 'TDM Guidelines' highlighted (1). The main content area is titled 'Pharmacy Information System & Clinic Pharmacy System' and shows the 'TDM GUIDELINES' page. At the top, there are search fields for 'TDM Drug' and 'Remarks' (2), and a 'Search' button (3). Below the search fields is a table with the following data:

TDM Drug	Remarks	Created Date	Updated Date
Acetylsalicylic Acid 100 mg, Glycine 45 mg Tablet		12/11/2015 02:35:52 PM	12/11/2015 02:36:31 PM
Acetylsalicylic Acid 300 mg Soluble Tablet		12/11/2015 02:33:21 PM	12/11/2015 02:34:23 PM
Amikacin 10 mg/ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:48:20 AM
Amikacin 250mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:47:53 AM
Amikacin 500mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:49:14 AM
Aminophylline 25mg/ml in 10ml Injection (250mg/10ml)		03/11/2013 04:24:31 PM	20/11/2015 06:18:54 PM
Aminophylline 5 mg/ml Injection		03/11/2013 04:24:31 PM	20/11/2015 06:19:17 PM
Carbamazepine 100 mg/5 ml (2% w/v) Syrup		03/11/2013 04:24:31 PM	24/11/2015 12:02:57 PM
Carbamazepine 200mg CR Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:03:35 PM
Carbamazepine 200mg Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:04:39 PM

Figure 3.16.1-1 TDM Guideline

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'TDM Guideline'

#### STEP 2

Search existing record by entering **TDM Drug** and/or **Remarks**

#### STEP 3

Click on the  button and system will display related record

#### Note

User is allowing to view the information by click on the related record and information will be displayed as Figure 3.16.1-2

**TDM Guideline**

TDM Drug: Acetylsalicylic Acid 100 mg, Glyc... Total Cost of Analysis(RM): 0.00

Time to reach steady state: NA Remarks:

Calculator: Digoxin, Aminoglycoside Pre, Carbamazepine, Phenobarbitone, Vancomycin Pre, Theophylline, Valproic Acid, Vancomycin Post. No Records Found!

**TDM Guideline Detail**

Sampling Type	After/Before	Default time	Lab Order	Therapeutic Range	UOM	Updated On
Random	AFTER	1	Salicylate Random	4 hours after ingestion	mcg/ml	12/11/2015

Figure 3.16.1-2 TDM Guideline

**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Menu: Penalty, Maintenance, Pharmacy (Active Ingredient, Administration Route, ATC Code Details, Cautionary & Instruction, CDR Regimen, CDR Regimen Category, Discipline & Sub-Discipline, Dosage Form, Drug, FPP Drug Price, Frequency, Formulation, Indication, Med-Counselling Topic & Subtopic, MTAC Info, PN Reference, PN Content, Radiopharma Element, Radiopharma Setup, Radiopharma Therapy, TDM Guidelines, Special Drug Request-Approver)

**TDM GUIDELINES**

TDM Drug: [Search] Remarks: [Search]

TDM Drug	Remarks	Created Date	Updated Date
Acetylsalicylic Acid 100 mg, Glycine 45 mg Tablet		12/11/2015 02:35:52 PM	12/11/2015 02:36:31 PM
Acetylsalicylic Acid 300 mg Soluble Tablet		12/11/2015 02:33:21 PM	12/11/2015 02:34:23 PM
Amikacin 10 mg/ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:48:20 AM
Amikacin 250mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:47:53 AM
Amikacin 500mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:49:14 AM
Aminophylline 25mg/ml in 10ml Injection (250mg/10ml)		03/11/2013 04:24:31 PM	20/11/2015 06:18:54 PM
Aminophylline 5 mg/ml Injection		03/11/2013 04:24:31 PM	20/11/2015 06:19:17 PM
Carbamazepine 100 mg/5 ml (2% w/v) Syrup		03/11/2013 04:24:31 PM	24/11/2015 12:02:57 PM
Carbamazepine 200mg CR Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:03:35 PM
Carbamazepine 200mg Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:04:39 PM

Figure 3.16.1-3 TDM Guideline

**STEP 4**



Click on the button to create a new record and TDM Guideline screen will be displayed as Figure 3.16.1-4

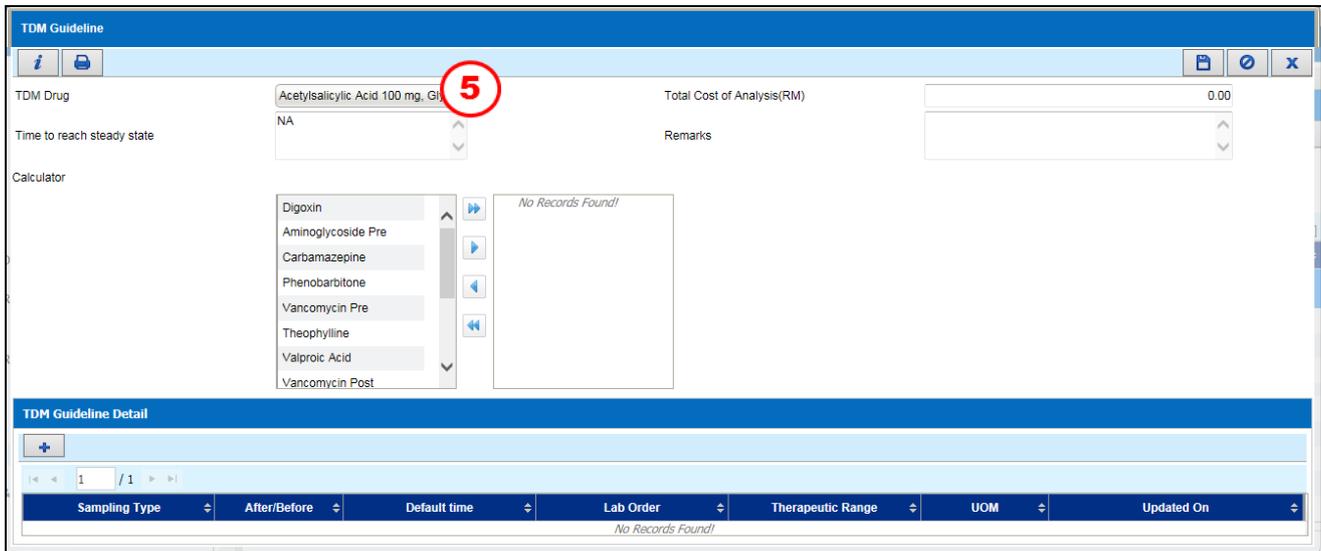
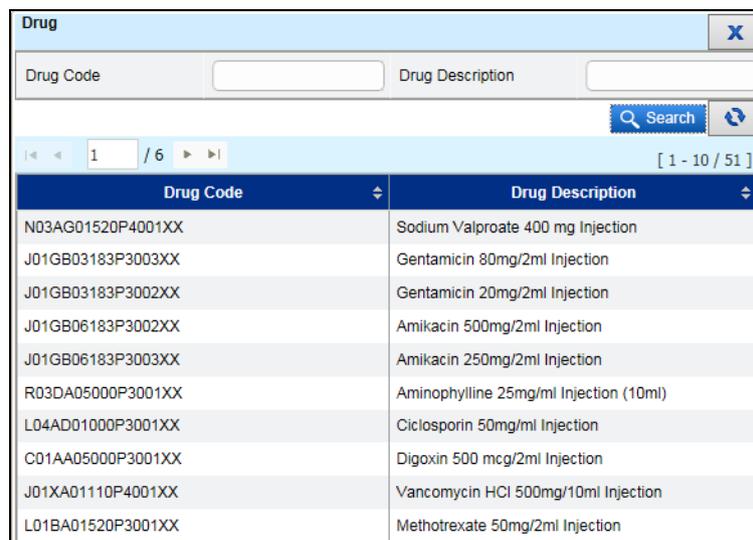


Figure 3.16.1-4 TDM Guideline

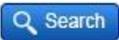
**STEP 5**

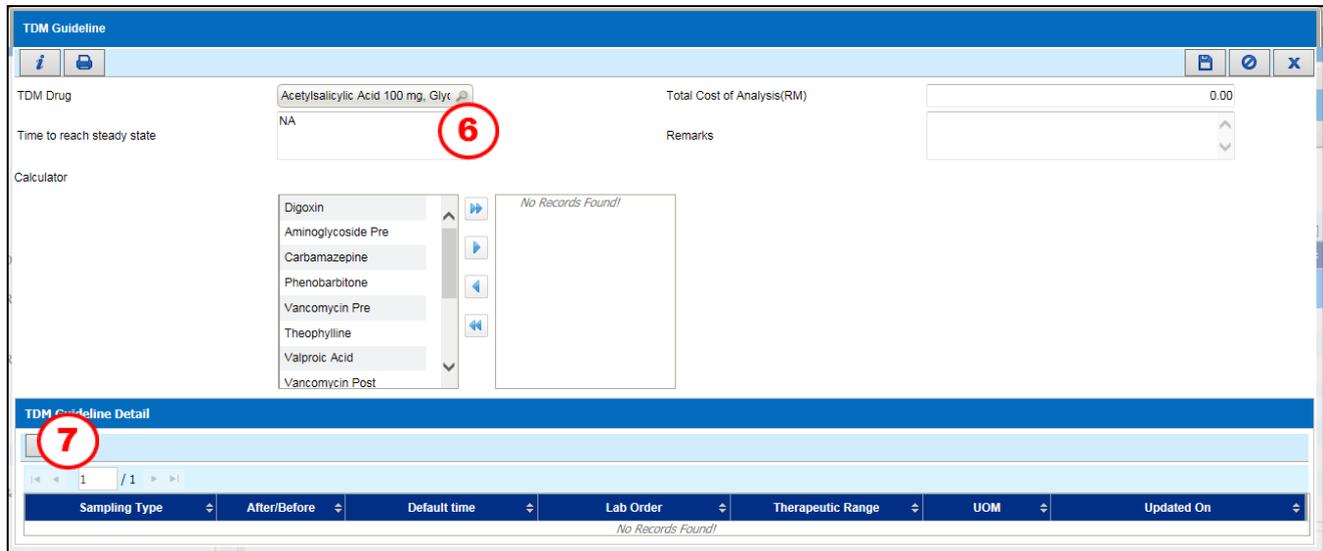
Click on **TDM Drug**  Drug window will be displayed as Figure 3.16.1-5



Drug Code	Drug Description
N03AG01520P4001XX	Sodium Valproate 400 mg Injection
J01GB03183P3003XX	Gentamicin 80mg/2ml Injection
J01GB03183P3002XX	Gentamicin 20mg/2ml Injection
J01GB06183P3002XX	Amikacin 500mg/2ml Injection
J01GB06183P3003XX	Amikacin 250mg/2ml Injection
R03DA05000P3001XX	Aminophylline 25mg/ml Injection (10ml)
L04AD01000P3001XX	Ciclosporin 50mg/ml Injection
C01AA05000P3001XX	Digoxin 500 mcg/2ml Injection
J01XA01110P4001XX	Vancomycin HCl 500mg/10ml Injection
L01BA01520P3001XX	Methotrexate 50mg/2ml Injection

Figure 3.16.1-5 Drug

- User is allowed to enter partially or fully searching criteria for **Drug Code** and **Drug Description**. Then click on the  button
- Double click on the selected **Drug Code**



The screenshot shows the 'TDM Guideline' form. At the top, there are fields for 'TDM Drug' (Acetylsalicylic Acid 100 mg, Glyc), 'Total Cost of Analysis(RM)' (0.00), 'Time to reach steady state' (NA), and 'Remarks'. Below these is a 'Calculator' section with a list of drugs: Digoxin, Aminoglycoside Pre, Carbamazepine, Phenobarbitone, Vancomycin Pre, Theophylline, Valproic Acid, and Vancomycin Post. A red circle '6' is around the 'Time to reach steady state' field. Below the calculator is a 'TDM Guideline Detail' section with a table header: Sampling Type, After/Before, Default time, Lab Order, Therapeutic Range, UOM, Updated On. A red circle '7' is around the 'TDM Guideline Detail' header. The table content is empty with the text 'No Records Found!'.

Figure 3.16.1-6 TDM Guideline

**STEP 6**

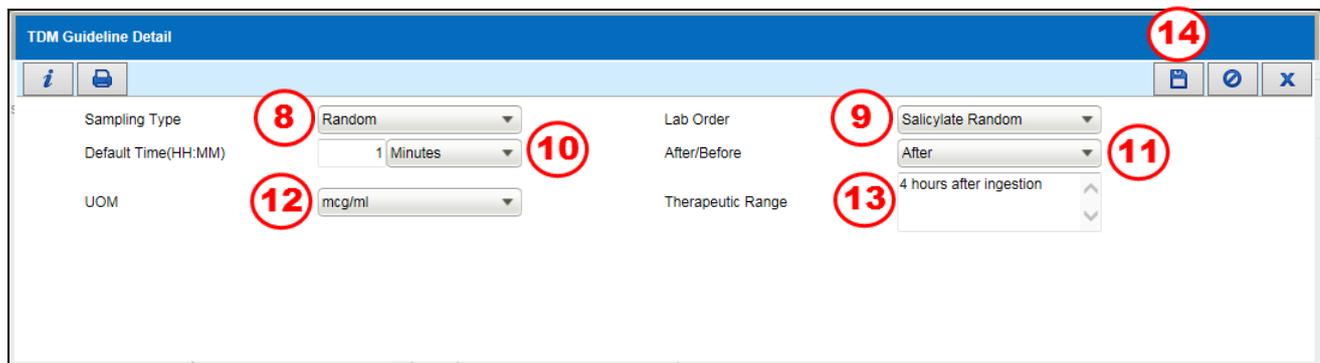
Enter **Time to reach steady state**

**Note**

- **Total Cost of Analysis(RM) and Remarks** is an optional field

**STEP 7**

Click on the  button and TDM Guideline Detail screen will be displayed as Figure 3.16.1-7



The screenshot shows the 'TDM Guideline Detail' form. It has several fields with red circles indicating steps: '8' around the 'Sampling Type' dropdown (set to 'Random'), '9' around the 'Lab Order' dropdown (set to 'Salicylate Random'), '10' around the 'Default Time(HH:MM)' field (set to '1 Minutes'), '11' around the 'After/Before' dropdown (set to 'After'), '12' around the 'UOM' dropdown (set to 'mcg/ml'), and '13' around the 'Therapeutic Range' dropdown (set to '4 hours after ingestion'). A red circle '14' is around the window title bar. The window title is 'TDM Guideline Detail'.

Figure 3.16.1-7 TDM Guideline Detail

**STEP 8**

Select **Sampling Type** from drop down box:

- POST 1
- POST 2
- Post
- Pre
- Random

**STEP 9**

Select **Lab Order**

**STEP 10**

Enter **Default Time(HH:MM)**

**STEP 11**

Select **After/Before** from drop down box:

- a) Before
- b) After

**STEP 12**

Select **UOM** from drop down box:

- a) mcg/ml
- b) mg/dL
- c) mmol/L
- d) ng/ml

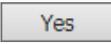
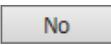
**STEP 13**

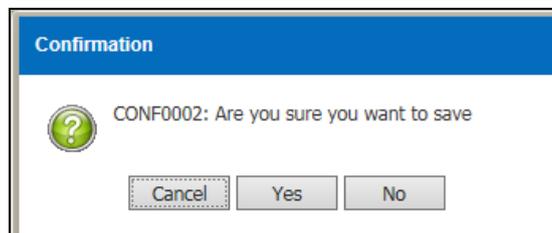
Enter **Therapeutic Range**

**STEP 14**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.16.1-8
- Click on the  button to save the record
- Click on the  or  button to cancel the saved record



**Figure 3.16.1-8 Confirmation Message**

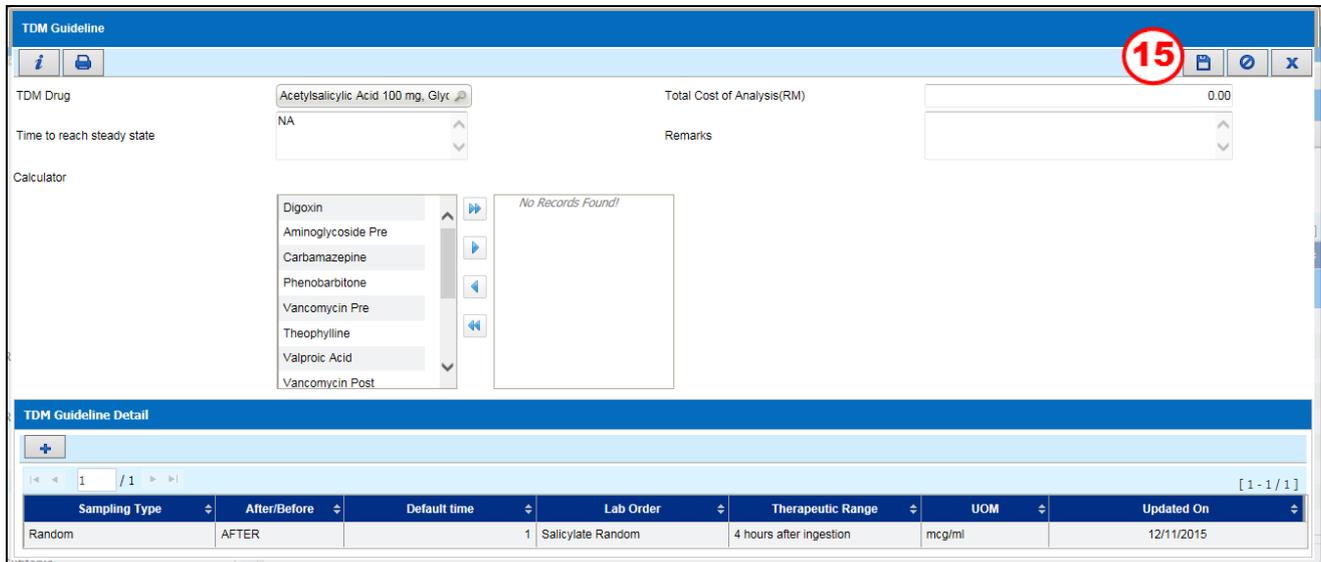


Figure 3.16.1-9 TDM Guideline

**Note**

Repeat **STEP 7** to **STEP 14** if there is more than 1 Sampling Type for the particular TDM Drug

**STEP 15**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.16.1-10
- Click on the  button to save the record
- Click on the  or  button to cancel the saved record

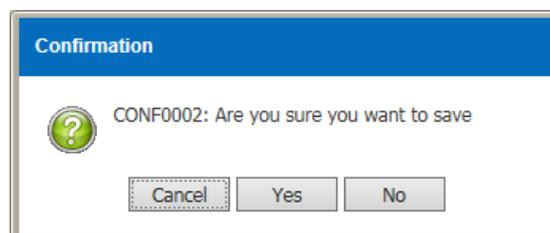
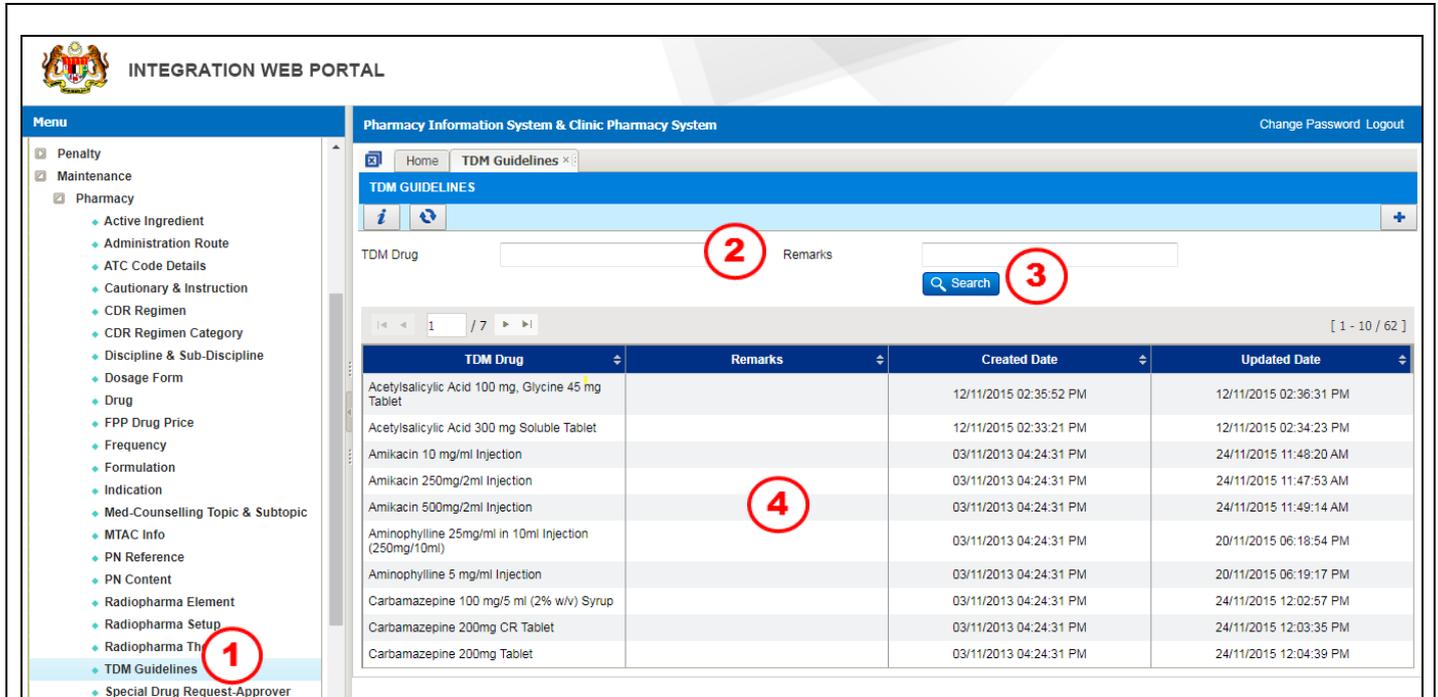


Figure 3.16.1-10 Confirmation Message

### 3.16.2 Modify TDM Guideline

To modify record for TDM Guideline, perform the steps below:



The screenshot shows the 'INTEGRATION WEB PORTAL' interface. On the left is a 'Menu' with 'Maintenance' > 'Pharmacy' > 'TDM Guidelines' highlighted (1). The main area is titled 'Pharmacy Information System & Clinic Pharmacy System' and contains a 'TDM GUIDELINES' section with a search bar (3) and a table of records. The table has columns: TDM Drug, Remarks, Created Date, and Updated Date. The record for 'Amikacin 500mg/2ml Injection' is highlighted (4).

TDM Drug	Remarks	Created Date	Updated Date
Acetylsalicylic Acid 100 mg, Glycine 45 mg Tablet		12/11/2015 02:35:52 PM	12/11/2015 02:36:31 PM
Acetylsalicylic Acid 300 mg Soluble Tablet		12/11/2015 02:33:21 PM	12/11/2015 02:34:23 PM
Amikacin 10 mg/ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:48:20 AM
Amikacin 250mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:47:53 AM
Amikacin 500mg/2ml Injection		03/11/2013 04:24:31 PM	24/11/2015 11:49:14 AM
Aminophylline 25mg/ml in 10ml Injection (250mg/10ml)		03/11/2013 04:24:31 PM	20/11/2015 06:18:54 PM
Aminophylline 5 mg/ml Injection		03/11/2013 04:24:31 PM	20/11/2015 06:19:17 PM
Carbamazepine 100 mg/5 ml (2% w/v) Syrup		03/11/2013 04:24:31 PM	24/11/2015 12:02:57 PM
Carbamazepine 200mg CR Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:03:35 PM
Carbamazepine 200mg Tablet		03/11/2013 04:24:31 PM	24/11/2015 12:04:39 PM

Figure 3.16.2-1 TDM Guideline

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'TDM Guideline'

#### STEP 2

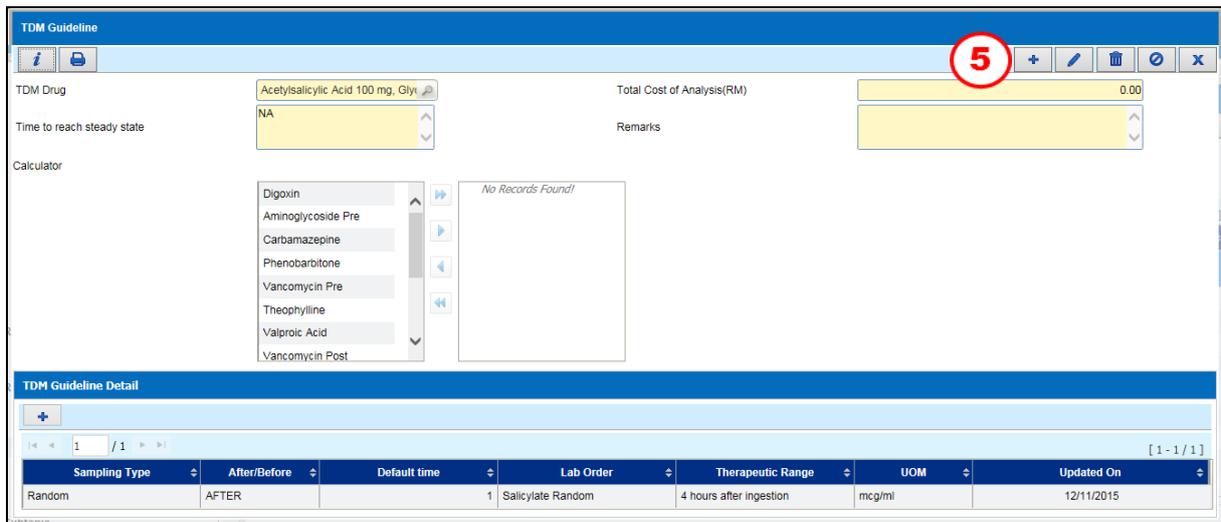
Search existing record by entering **TDM Drug** and/or **Remarks**

#### STEP 3

Click on the  button and system will display related record

#### STEP 4

Click on the selected record



The screenshot shows the 'TDM Guideline' form. At the top right, there is a toolbar with several icons. The edit icon (a pencil) is circled in red with the number '5'. The form fields include:

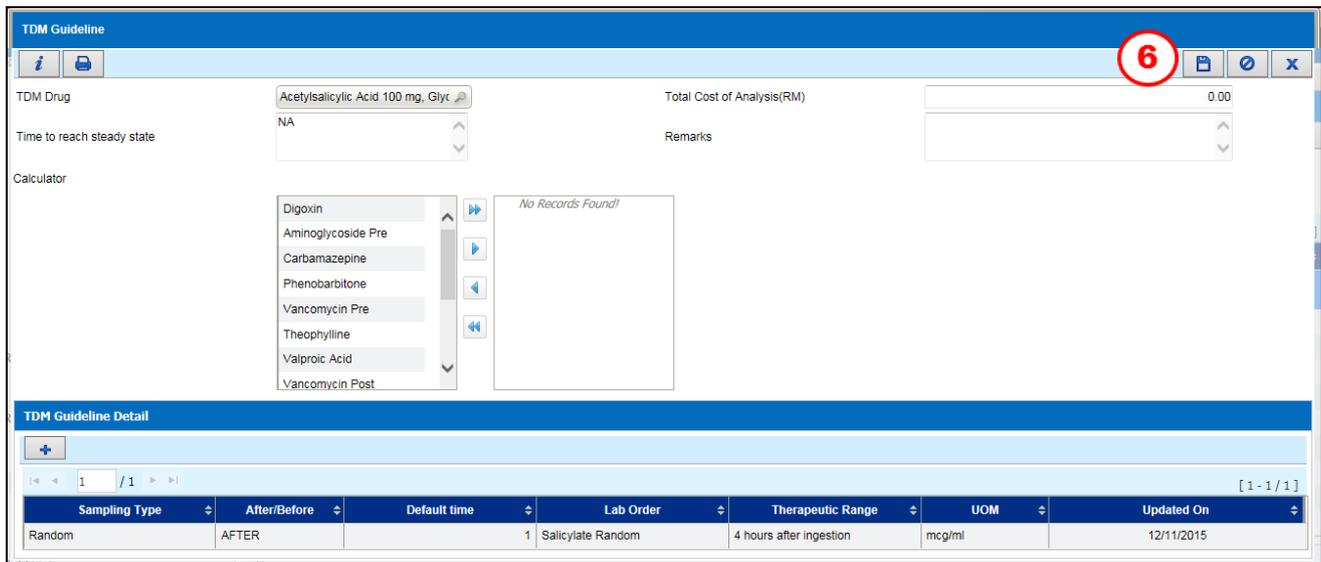
- TDM Drug: Acetylsalicylic Acid 100 mg, Glyc
- Time to reach steady state: NA
- Total Cost of Analysis(RM): 0.00
- Remarks: (empty text area)
- Calculator: A list of drugs (Digoxin, Aminoglycoside Pre, Carbamazepine, Phenobarbitone, Vancomycin Pre, Theophylline, Valproic Acid, Vancomycin Post) and a 'No Records Found!' message.
- TDM Guideline Detail: A table with one record.

Sampling Type	After/Before	Default time	Lab Order	Therapeutic Range	UOM	Updated On
Random	AFTER	1	Salicylate Random	4 hours after ingestion	mcg/ml	12/11/2015

Figure 3.16.2-2 TDM Guideline

**STEP 5**

Click on the  button to edit the record



The screenshot shows the 'TDM Guideline' form after editing. At the top right, there is a toolbar with several icons. The save icon (a floppy disk) is circled in red with the number '6'. The form fields are identical to the previous screenshot.

Figure 3.16.2-3 TDM Guideline

**Note**

User is allowing to edit:

- **TDM Drug**
- **Time to reach steady state**
- **Total Cost of Analysis(RM)**
- **TDM Guideline Detail**

**STEP 6**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.16.2-4

- Click on the  button to save the edited record
- Click on the  or  button to cancel the edited record

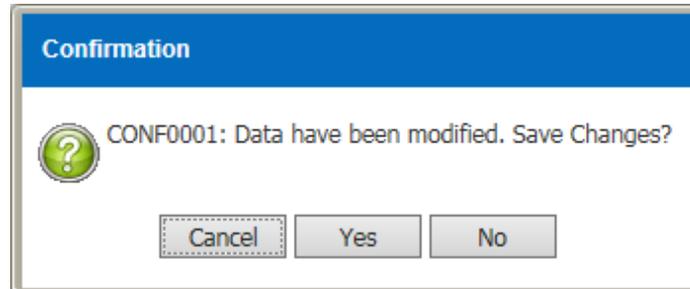
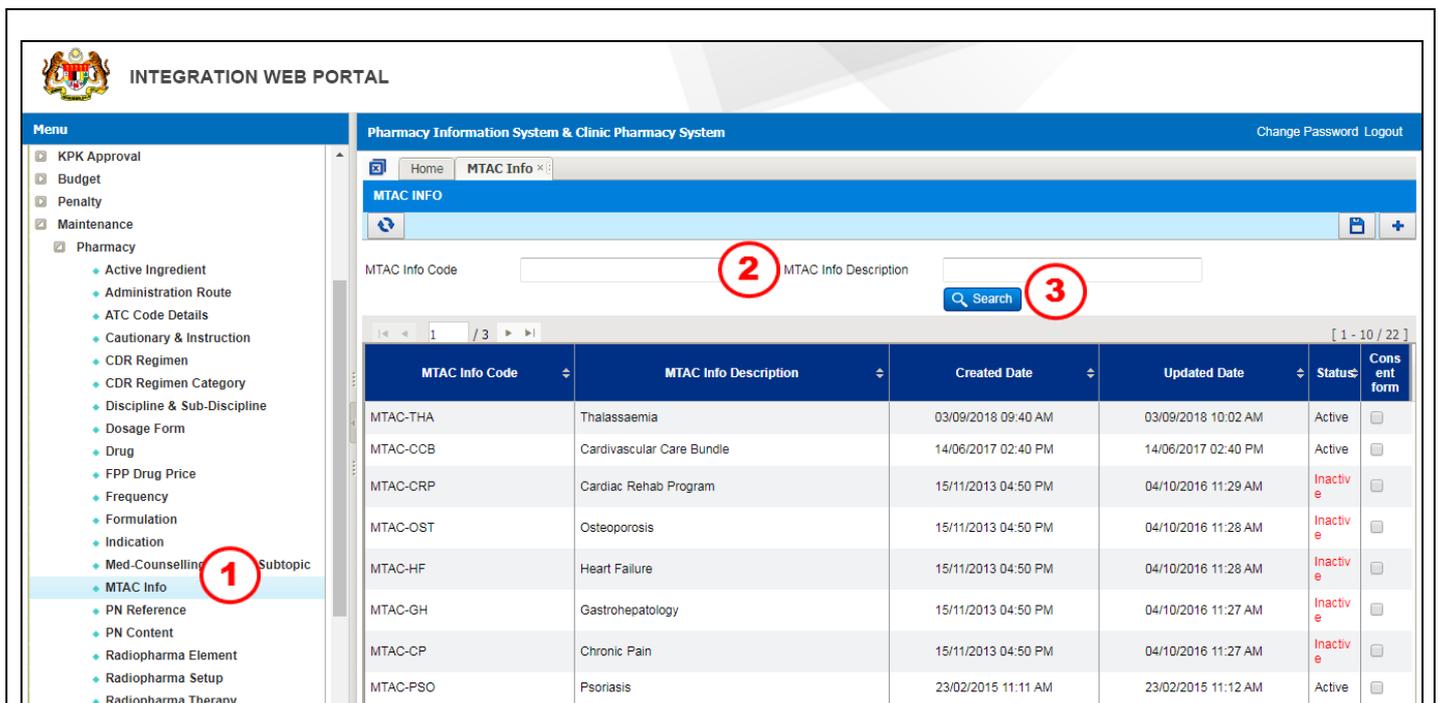


Figure 3.16.2-4 Confirmation Message

### 3.17 MTAC Info

#### 3.17.1 Create new MTAC Info

To create new record for MTAC Info, perform the steps below:



MTAC Info Code	MTAC Info Description	Created Date	Updated Date	Status	Consent form
MTAC-THA	Thalassaemia	03/09/2018 09:40 AM	03/09/2018 10:02 AM	Active	<input type="checkbox"/>
MTAC-CCB	Cardiovascular Care Bundle	14/06/2017 02:40 PM	14/06/2017 02:40 PM	Active	<input type="checkbox"/>
MTAC-CRP	Cardiac Rehab Program	15/11/2013 04:50 PM	04/10/2016 11:29 AM	Inactive	<input type="checkbox"/>
MTAC-OST	Osteoporosis	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-HF	Heart Failure	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-GH	Gastrohepatology	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-CP	Chronic Pain	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-PSO	Psoriasis	23/02/2015 11:11 AM	23/02/2015 11:12 AM	Active	<input type="checkbox"/>

Figure 3.17.1-1 MTAC Info

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Therapy Linked Radiopharma'

#### STEP 2

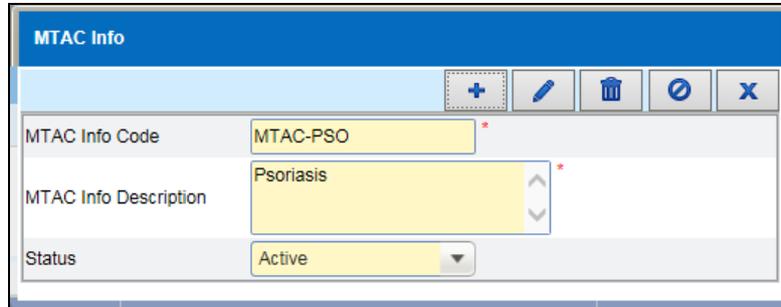
Search existing record by entering **MTAC Info Code** and/or **MTAC Info Description**

#### STEP 3

Click on the  button and system will display related record

**Note**

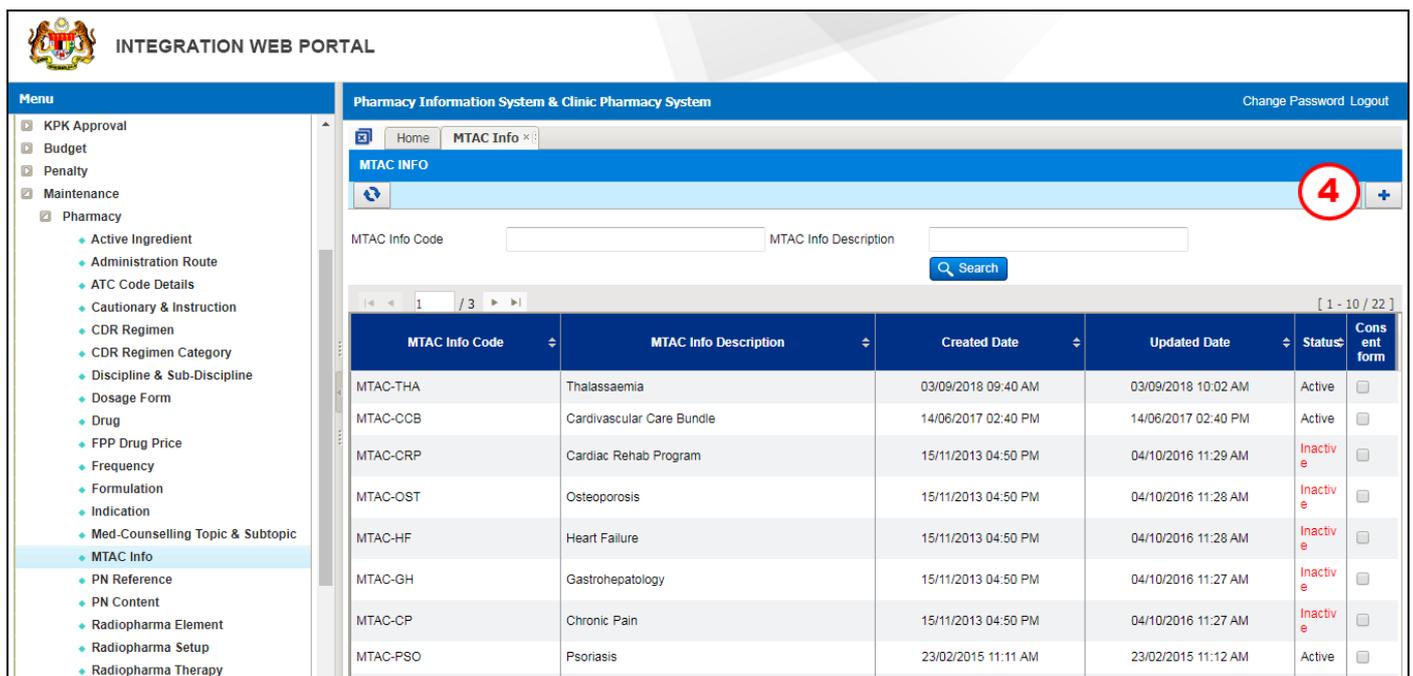
User is allowing to view the information by click on the related record and information will be displayed as Figure 3.17.1-2



**Figure 3.17.1-2 MTAC Info**

**Note**

Click on the  button to close the screen



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Menu

- KPK Approval
- Budget
- Penalty
- Maintenance
  - Pharmacy
    - Active Ingredient
    - Administration Route
    - ATC Code Details
    - Cautionary & Instruction
    - CDR Regimen
    - CDR Regimen Category
    - Discipline & Sub-Discipline
    - Dosage Form
    - Drug
    - FPP Drug Price
    - Frequency
    - Formulation
    - Indication
    - Med-Counselling Topic & Subtopic
    - MTAC Info**
    - PN Reference
    - PN Content
    - Radiopharma Element
    - Radiopharma Setup
    - Radiopharma Therapy

MTAC INFO

MTAC Info Code:  MTAC Info Description:

MTAC Info Code	MTAC Info Description	Created Date	Updated Date	Status	Consent form
MTAC-THA	Thalassaemia	03/09/2018 09:40 AM	03/09/2018 10:02 AM	Active	<input type="checkbox"/>
MTAC-CCB	Cardiovascular Care Bundle	14/06/2017 02:40 PM	14/06/2017 02:40 PM	Active	<input type="checkbox"/>
MTAC-CRP	Cardiac Rehab Program	15/11/2013 04:50 PM	04/10/2016 11:29 AM	Inactive	<input type="checkbox"/>
MTAC-OST	Osteoporosis	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-HF	Heart Failure	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-GH	Gastrohepatology	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-CP	Chronic Pain	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-PSO	Psoriasis	23/02/2015 11:11 AM	23/02/2015 11:12 AM	Active	<input type="checkbox"/>

**Figure 3.17.1-3 MTAC Info**

**STEP 4**

Click on the  button to create a new record and MTAC Info screen will be displayed as Figure 3.17.1-4

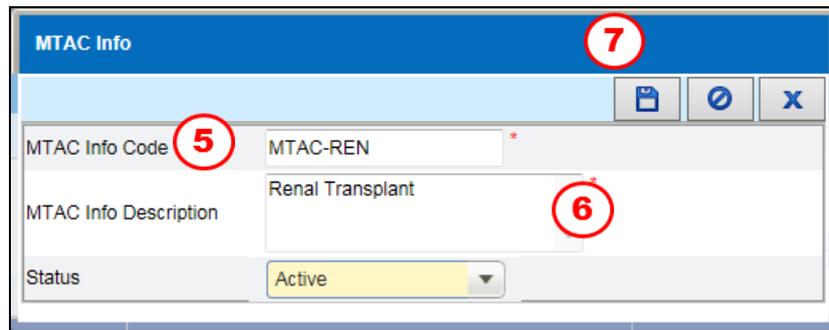


Figure 3.17.1-4 MTAC Info

**STEP 5**

Enter **MTAC Info Code**

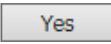
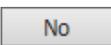
**STEP 6**

Enter **MTAC Info Description**

**STEP 7**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.17.1-5
- Click on the  button to save the record
- Click on the  or  button to cancel the saved record

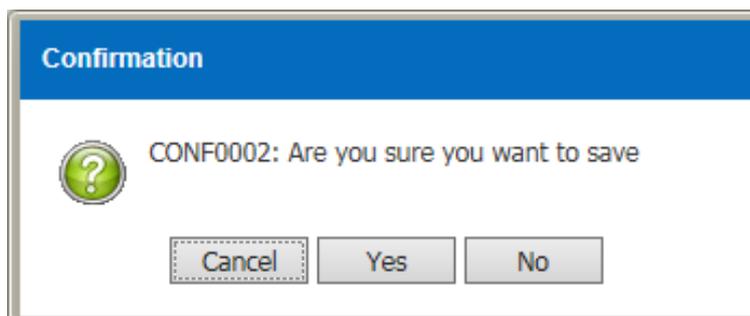
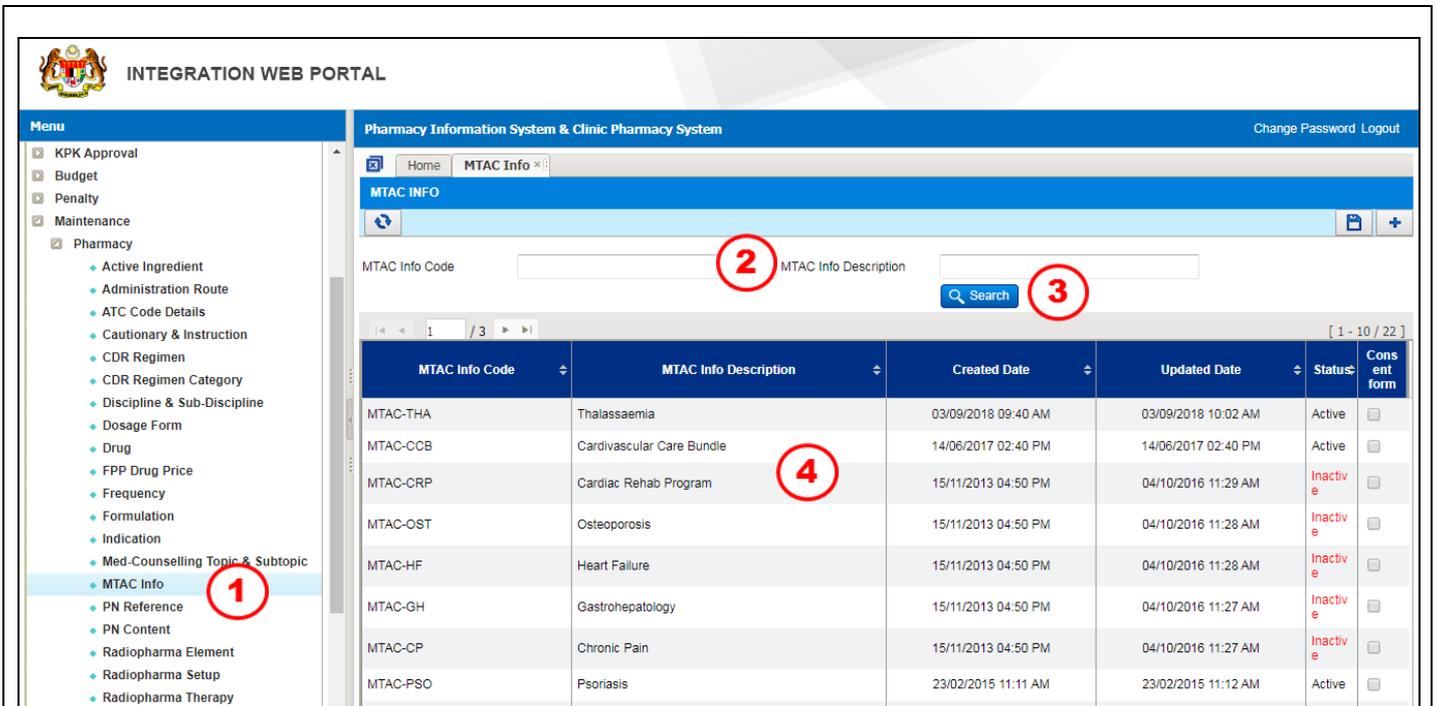


Figure 3.17.1-5 Confirmation Message

### 3.17.2 Modify MTAC Info

To modify record for MTAC Info, perform the steps below:



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Menu

- KPK Approval
- Budget
- Penalty
- Maintenance
  - Pharmacy
    - Active Ingredient
    - Administration Route
    - ATC Code Details
    - Cautionary & Instruction
    - CDR Regimen
    - CDR Regimen Category
    - Discipline & Sub-Discipline
    - Dosage Form
    - Drug
    - FPP Drug Price
    - Frequency
    - Formulation
    - Indication
    - Med-Counselling Topic & Subtopic
    - MTAC Info**
    - PN Reference
    - PN Content
    - Radiopharma Element
    - Radiopharma Setup
    - Radiopharma Therapy

MTAC INFO

MTAC Info Code  MTAC Info Description

Search

MTAC Info Code	MTAC Info Description	Created Date	Updated Date	Status	Consent form
MTAC-THA	Thalassaemia	03/09/2018 09:40 AM	03/09/2018 10:02 AM	Active	<input type="checkbox"/>
MTAC-CCB	Cardiovascular Care Bundle	14/06/2017 02:40 PM	14/06/2017 02:40 PM	Active	<input type="checkbox"/>
MTAC-CRP	Cardiac Rehab Program	15/11/2013 04:50 PM	04/10/2016 11:29 AM	Inactive	<input type="checkbox"/>
MTAC-OST	Osteoporosis	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-HF	Heart Failure	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-GH	Gastrohepatology	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-CP	Chronic Pain	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-PSO	Psoriasis	23/02/2015 11:11 AM	23/02/2015 11:12 AM	Active	<input type="checkbox"/>

Figure 3.17.2-1 MTAC Info

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Therapy Linked Radiopharma'

#### STEP 2

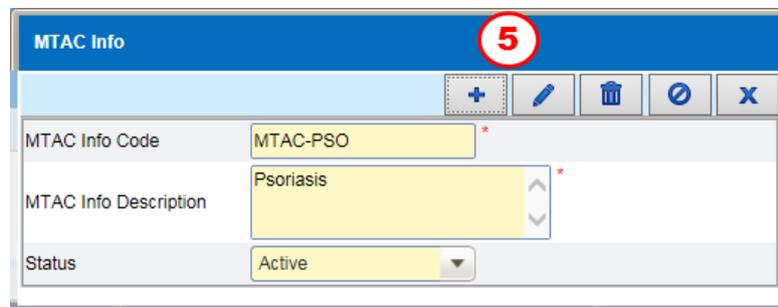
Search existing record by entering **MTAC Info Code** and/or **MTAC Info Description**

#### STEP 3

Click on the  button and system will display related record

#### STEP 4

Click on the selected record



MTAC Info

MTAC Info Code

MTAC Info Description

Status

Figure 3.17.2-2 MTAC Info

#### STEP 5

Click on the  button to edit the record

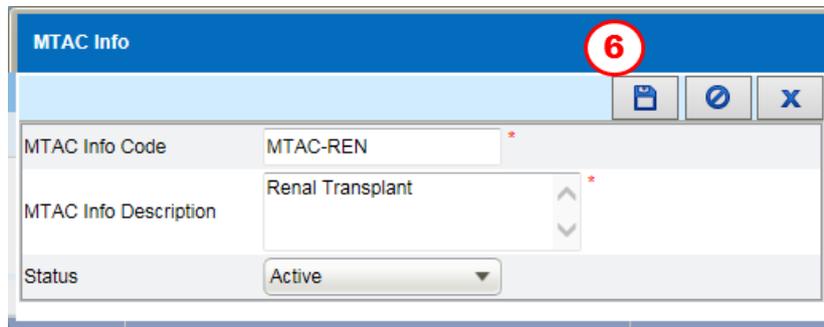


Figure 3.17.2-3 MTAC Info

**Note**

User is allowing to edit:

- **MTAC Info Code**
- **MTAC Info Description**
- **Status**

**STEP 6**

Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.17.2-4
- Click on the  button to save the edited record
- Click on the  or  button to cancel the edited record

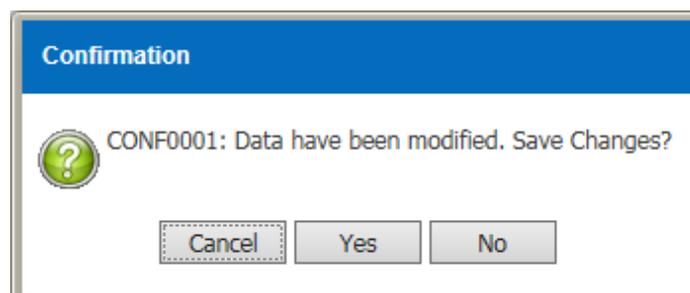


Figure 3.17.2-4 Confirmation Message

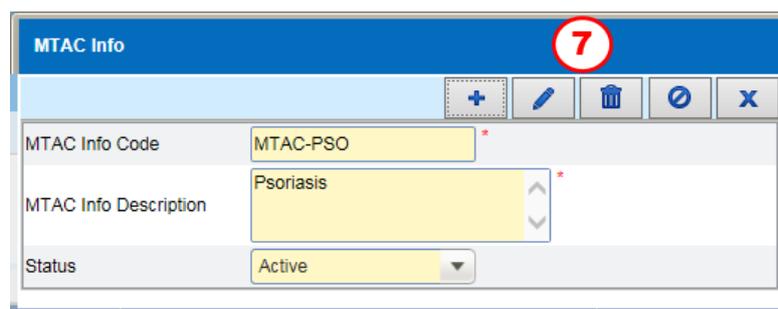


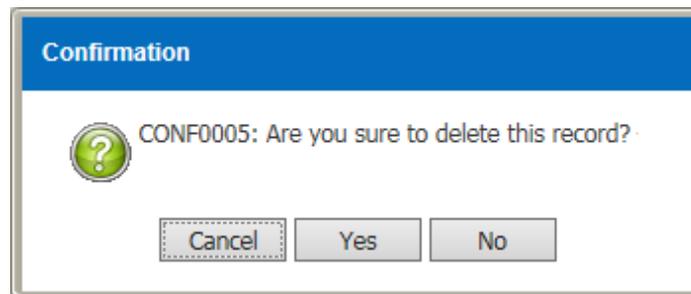
Figure 3.17.2-5 MTAC Info

**STEP 7**

Click on the  button to delete the record

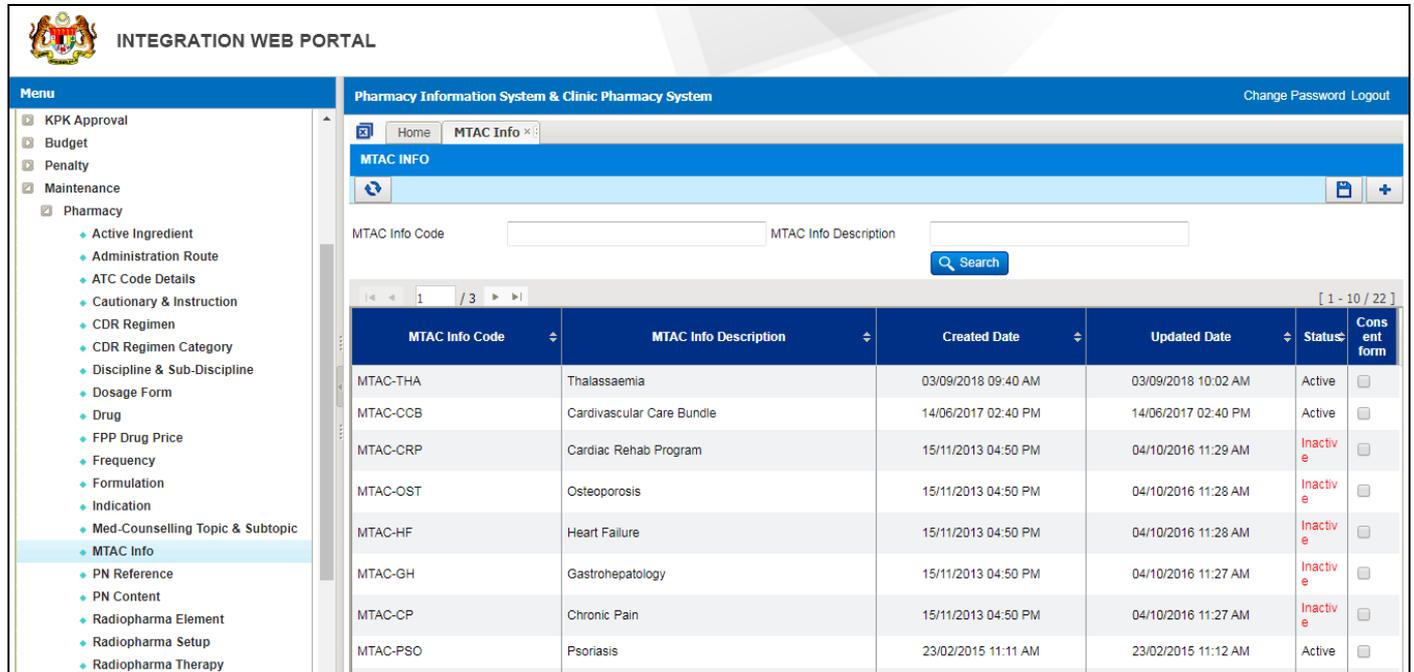
**Note**

- System will display a Confirmation Message as Figure 3.17.2-6
- Click on the  button to delete the record



**Figure 3.17.2-6 Confirmation Message**

- The status of the record will be **Inactive** as figure 3.17.2-7



**INTEGRATION WEB PORTAL**

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home MTAC Info x1

MTAC INFO

MTAC Info Code  MTAC Info Description

[ 1 - 10 / 22 ]

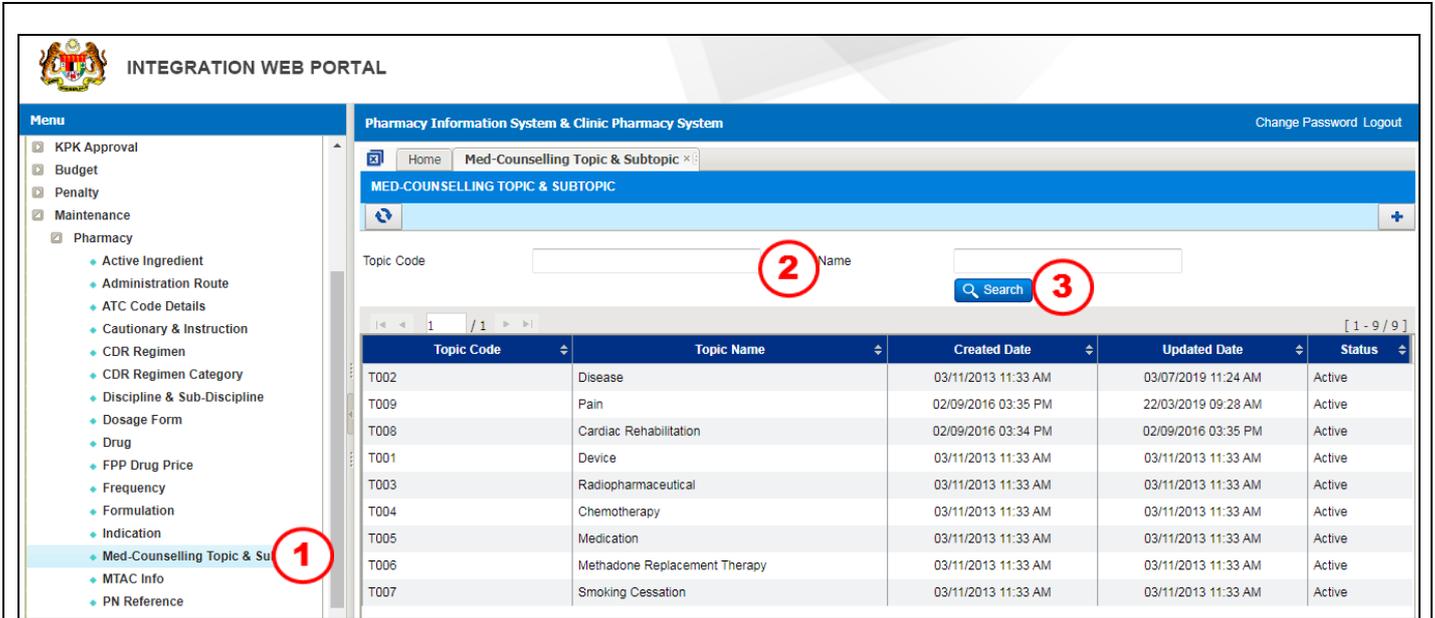
MTAC Info Code	MTAC Info Description	Created Date	Updated Date	Status	Consent form
MTAC-THA	Thalassaemia	03/09/2018 09:40 AM	03/09/2018 10:02 AM	Active	<input type="checkbox"/>
MTAC-CCB	Cardiovascular Care Bundle	14/06/2017 02:40 PM	14/06/2017 02:40 PM	Active	<input type="checkbox"/>
MTAC-CRP	Cardiac Rehab Program	15/11/2013 04:50 PM	04/10/2016 11:29 AM	Inactive	<input type="checkbox"/>
MTAC-OST	Osteoporosis	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-HF	Heart Failure	15/11/2013 04:50 PM	04/10/2016 11:28 AM	Inactive	<input type="checkbox"/>
MTAC-GH	Gastrohepatology	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-CP	Chronic Pain	15/11/2013 04:50 PM	04/10/2016 11:27 AM	Inactive	<input type="checkbox"/>
MTAC-PSO	Psoriasis	23/02/2015 11:11 AM	23/02/2015 11:12 AM	Active	<input type="checkbox"/>

**Figure 3.17.2-7 MTAC Info**

### 3.18 Med-Counselling Topic & Subtopic

#### 3.18.1 Create New Med-Counselling Topic & Subtopic

To create new record for Med-Counselling Topic & Subtopic, perform the steps below:



Topic Code	Topic Name	Created Date	Updated Date	Status
T002	Disease	03/11/2013 11:33 AM	03/07/2019 11:24 AM	Active
T009	Pain	02/09/2016 03:35 PM	22/03/2019 09:28 AM	Active
T008	Cardiac Rehabilitation	02/09/2016 03:34 PM	02/09/2016 03:35 PM	Active
T001	Device	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T003	Radiopharmaceutical	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T004	Chemotherapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T005	Medication	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T006	Methadone Replacement Therapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T007	Smoking Cessation	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active

Figure 3.18.1-1 Med-Counselling Topic & Subtopic

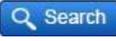
#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Med-Counselling Topic & Subtopic'

#### STEP 2

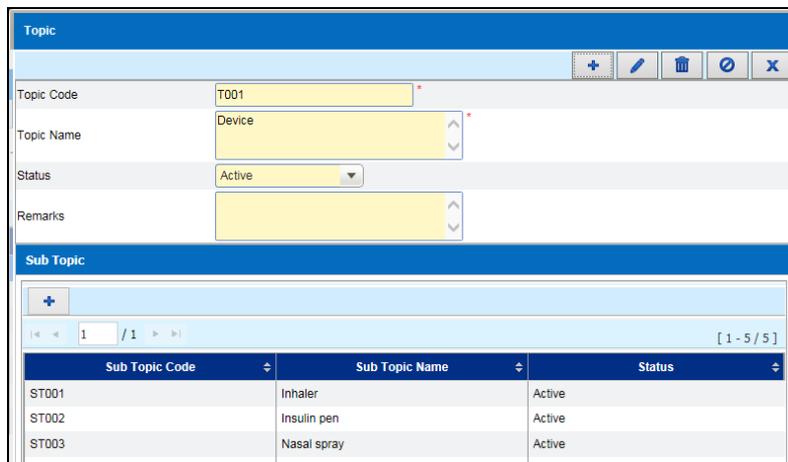
Search existing record by entering **Topic Code** and/or **Topic Name**

#### STEP 3

Click on the  button and system will display related record

#### Note

User is allowing to view the information by click on the related record and information will be displayed as Figure 3.18.1-2



Sub Topic Code	Sub Topic Name	Status
ST001	Inhaler	Active
ST002	Insulin pen	Active
ST003	Nasal spray	Active

Figure 3.18.1-2 Topic

**Note**

Click on the button to close the screen

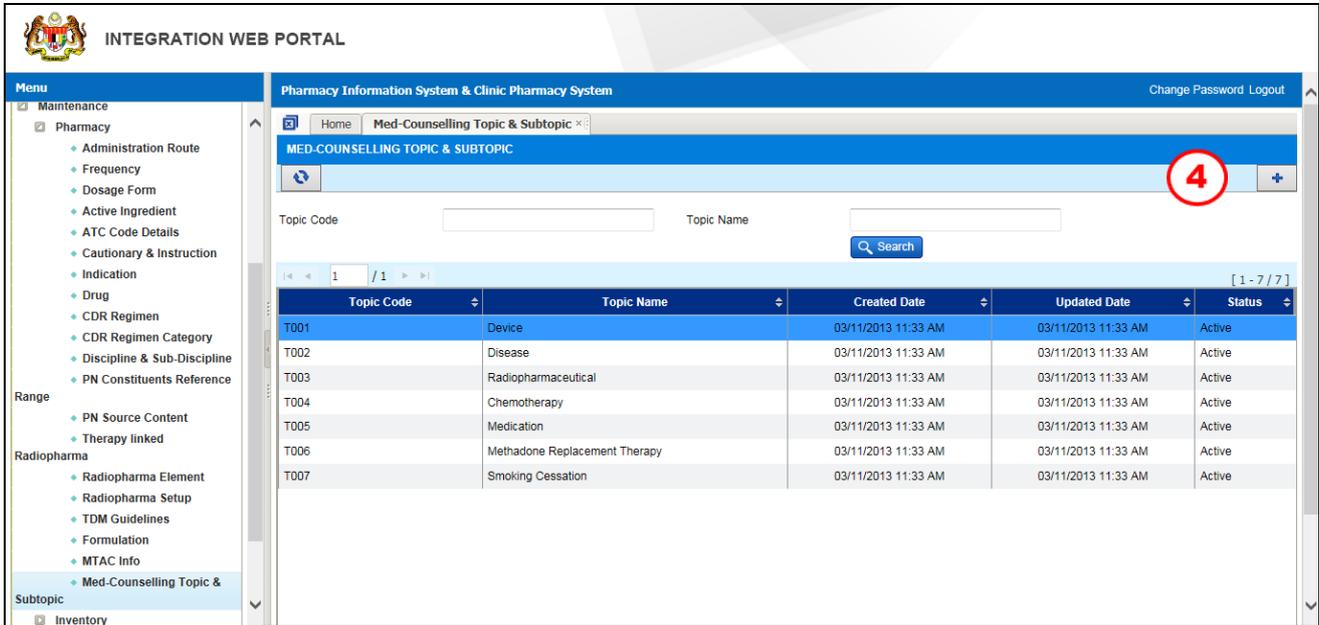


Figure 3.18.1-3 Med-Counselling Topic & Subtopic

**STEP 4**

Click on the button to create a new record and Topic screen will be displayed as Figure 3.18.1-4

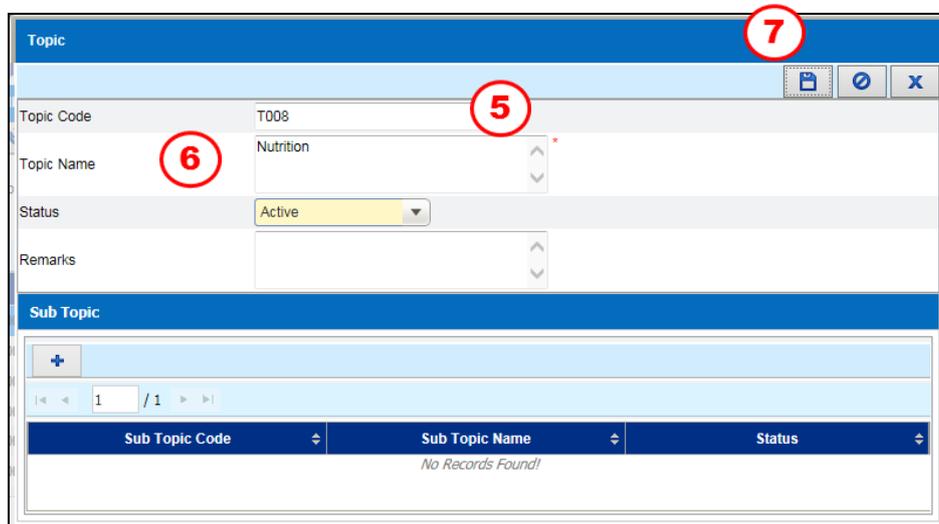


Figure 3.18.1-4 Topic

**STEP 5**

Enter **Topic Code**

**STEP 6**

Enter **Topic Name**

**Note**

Remarks is an optional field

**STEP 7**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.18.1-5
- Click on the  button to save the transaction
- Click on the  or  button to cancel the saved record

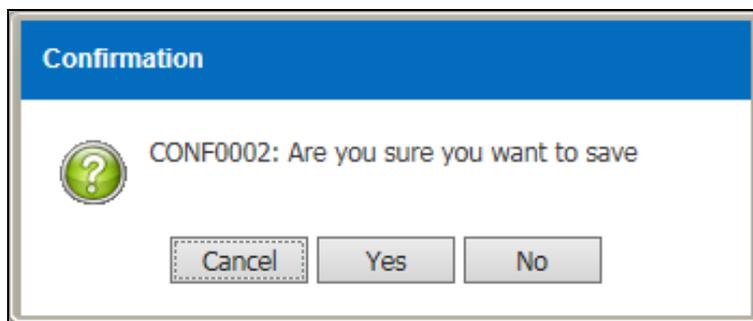


Figure 3.18.1-5 Confirmation Message

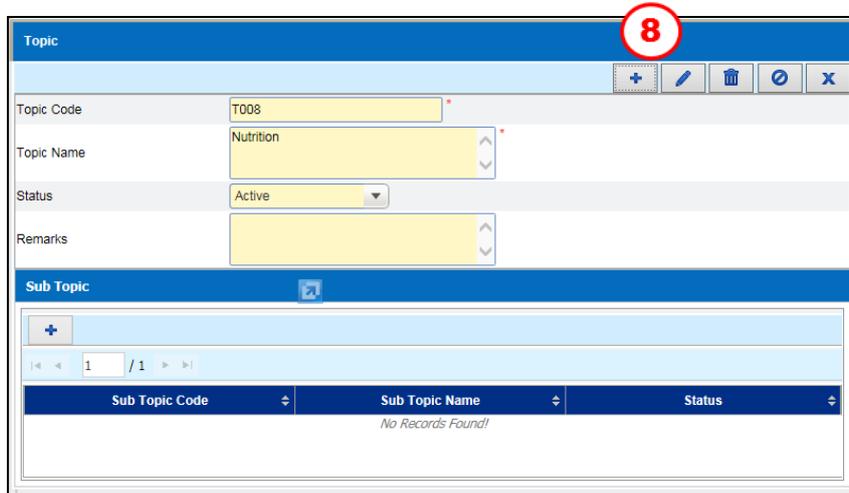


Figure 3.18.1-6 Topic

**STEP 8**

Click on the  button to edit the record

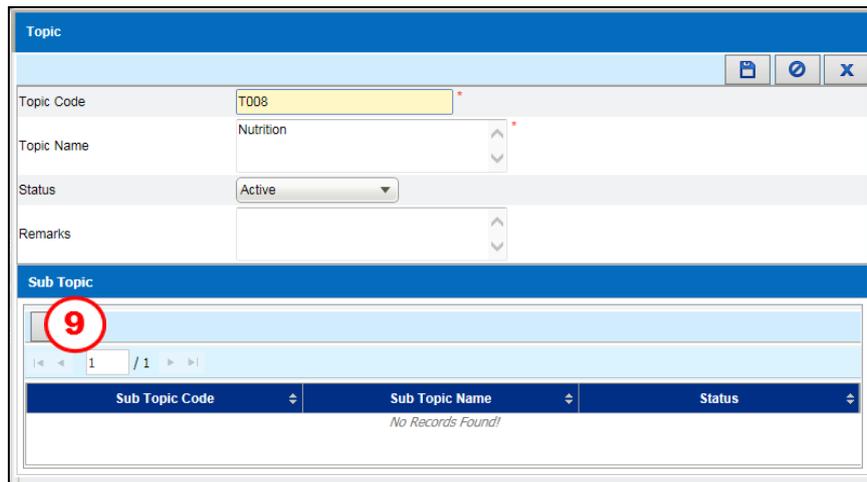


Figure 3.18.1-7 Topic

**STEP 9**

Click on the  button and Sub Topic screen will be displayed as figure 3.18.1-7

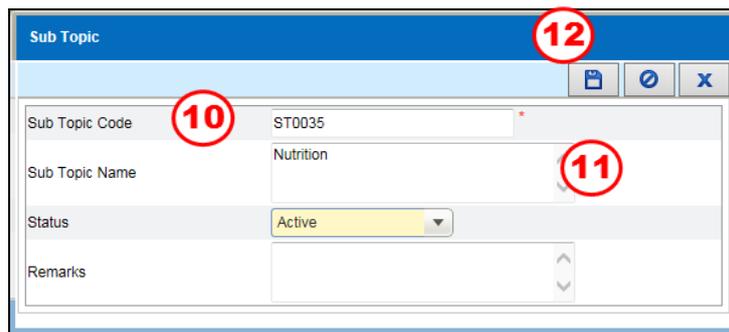


Figure 3.18.1-8 Sub Topic

**STEP 10**

Enter **Sub Topic Code**

**STEP 11**

Enter **Sub Topic Name**

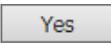
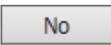
**Note**

**Remarks** is an optional field

**STEP 12**

Click on the  button to save the record

**Note**

- System will display a Confirmation Message as Figure 3.18.1-9
- Click on the  button to save the transaction
- Click on the  or  button to cancel the saved record

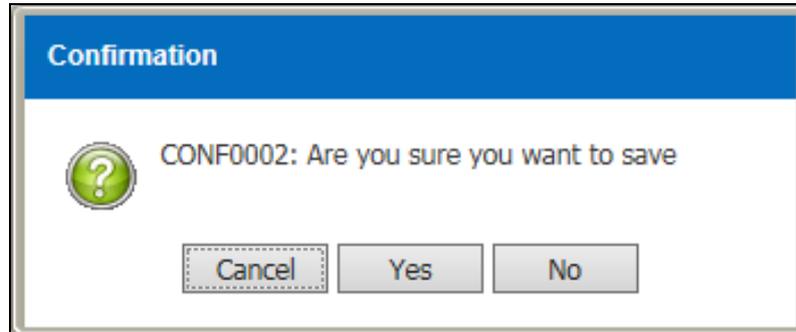


Figure 3.18.1-9 Confirmation Message

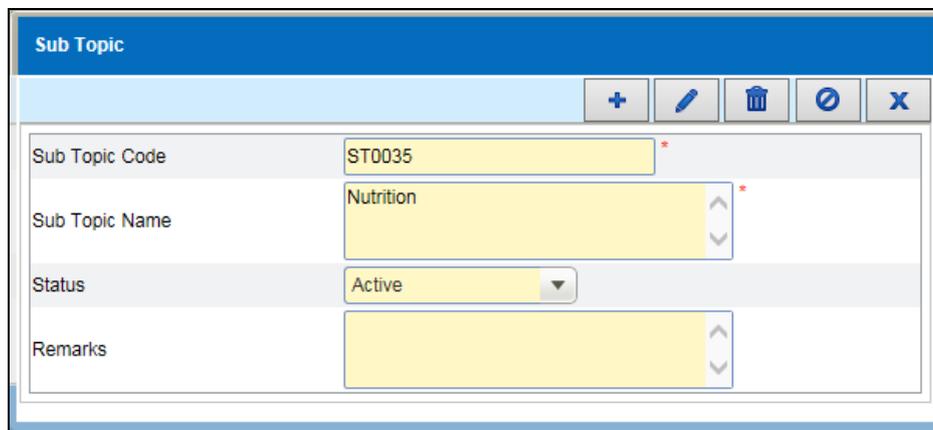


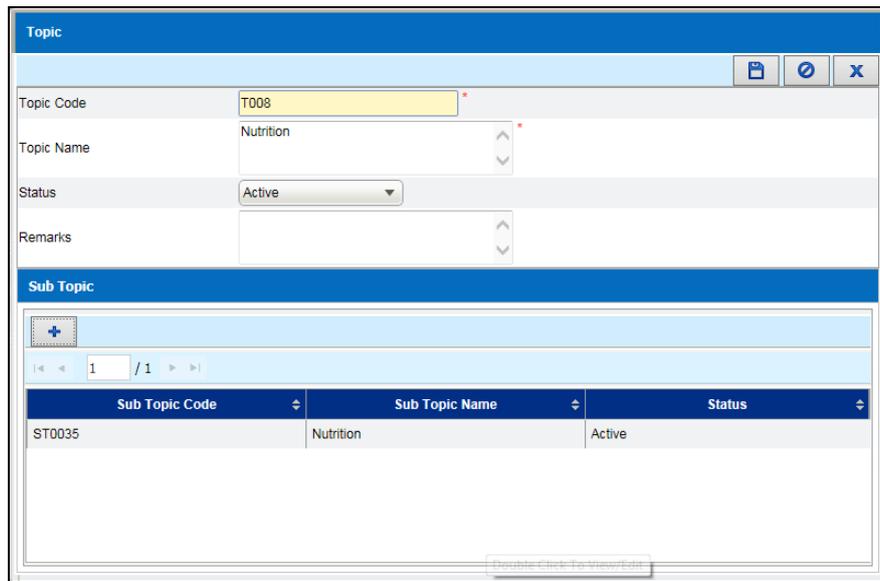
Figure 3.18.1-10 Sub Topic

**Note**

User is allow to add more than 1 Sub Topic by click on the  button and follow **STEP 10** to **STEP 12**

**Note**

Click on the  button to close the screen

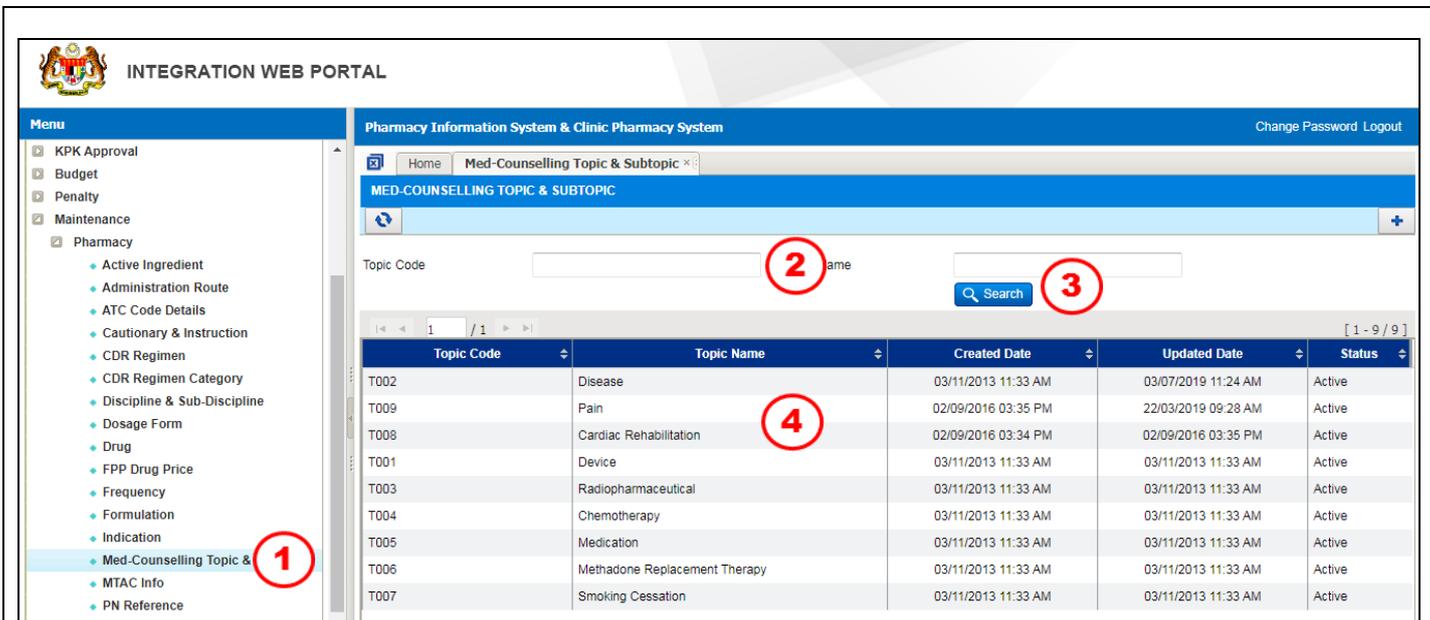


Topic		
Topic Code	T008	*
Topic Name	Nutrition	*
Status	Active	
Remarks		
Sub Topic		
+ [Add]		
1 / 1		
Sub Topic Code	Sub Topic Name	Status
ST0035	Nutrition	Active

Figure 3.18.1-11 Topic

### 3.18.2 Modify Med-Counselling Topic & Subtopic

To Modify record for Med-Counselling Topic & Sub Topic, perform the steps below:



INTEGRATION WEB PORTAL

Pharmacy Information System & Clinic Pharmacy System

Change Password Logout

Home Med-Counselling Topic & Subtopic

MED-COUNSELLING TOPIC & SUBTOPIC

Topic Code  ame  Search

Topic Code	Topic Name	Created Date	Updated Date	Status
T002	Disease	03/11/2013 11:33 AM	03/07/2019 11:24 AM	Active
T009	Pain	02/09/2016 03:35 PM	22/03/2019 09:28 AM	Active
T008	Cardiac Rehabilitation	02/09/2016 03:34 PM	02/09/2016 03:35 PM	Active
T001	Device	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T003	Radiopharmaceutical	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T004	Chemotherapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T005	Medication	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T006	Methadone Replacement Therapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T007	Smoking Cessation	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active

Figure 3.18.2-1 Med-Counselling Topic & Subtopic

#### STEP 1

Click on 'Maintenance' menu, followed by 'Pharmacy' and click on 'Med-Counselling Topic & Subtopic'

#### STEP 2

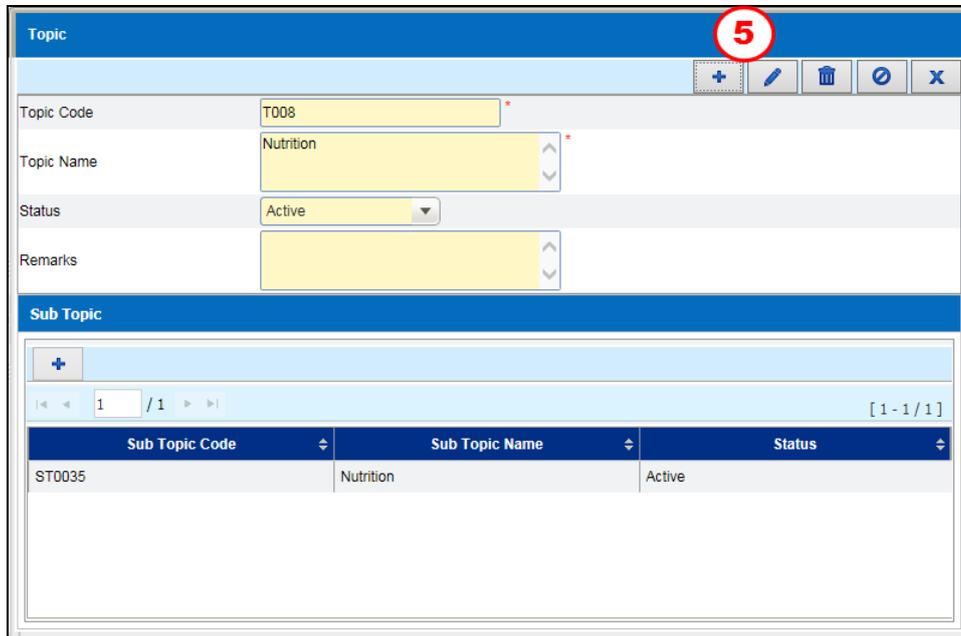
Search existing record by entering **Topic Code** and/or **Topic Name**

#### STEP 3

Click on the  button and system will display related record

**STEP 4**

Click on the selected record



Topic		
Topic Code	T008	*
Topic Name	Nutrition	*
Status	Active	
Remarks		

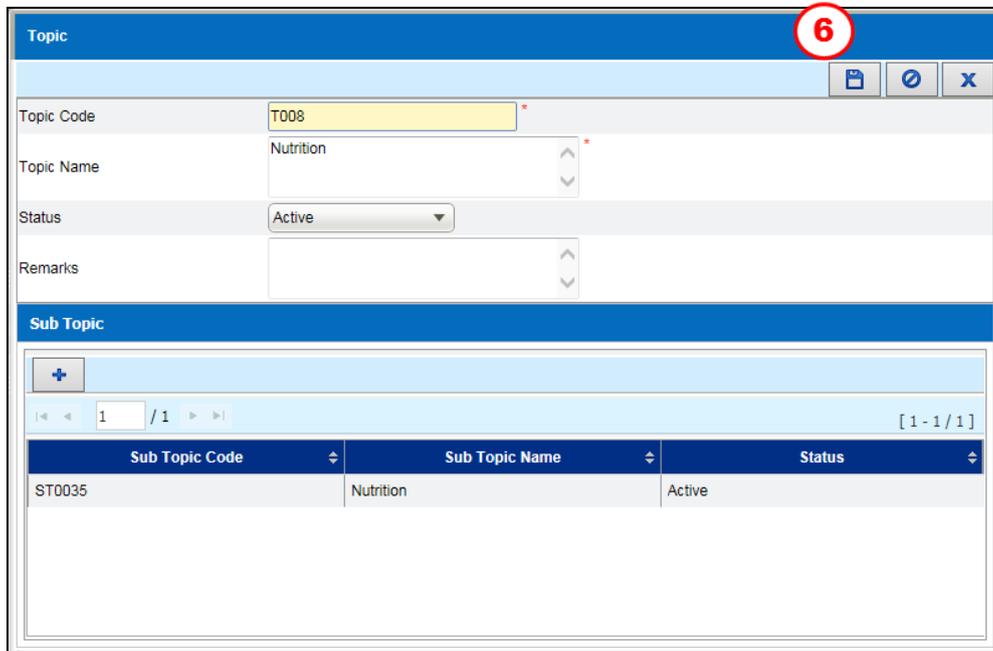
  

Sub Topic		
1	/ 1	[ 1 - 1 / 1 ]
Sub Topic Code	Sub Topic Name	Status
ST0035	Nutrition	Active

**Figure 3.18.2-2 Topic**

**STEP 5**

Click on the  button to edit the record



Topic		
Topic Code	T008	*
Topic Name	Nutrition	*
Status	Active	
Remarks		

Sub Topic		
1	/ 1	[ 1 - 1 / 1 ]
Sub Topic Code	Sub Topic Name	Status
ST0035	Nutrition	Active

**Figure 3.18.2-3 Topic**

**Note**

User is allowing to edit:

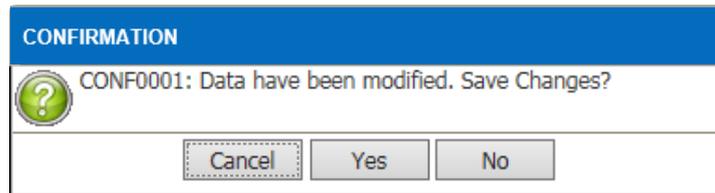
- **Topic Name**
- **Status**
- **Remarks**
- **Sub Topic**

**STEP 6**

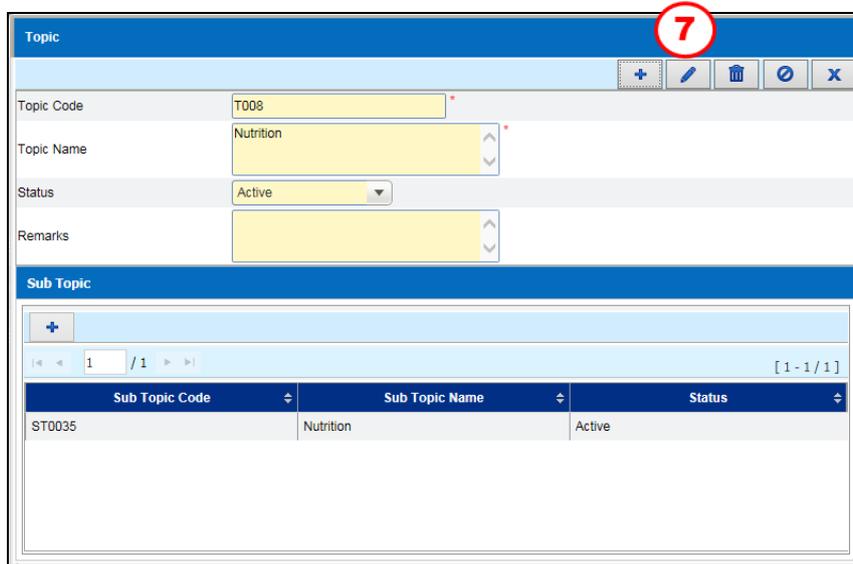
Click on the  button to save the edited record

**Note**

- System will display a Confirmation Message as Figure 3.18.2-4
- Click on the  button to save the edited record
- Click on the  or  button to cancel the edited record



**Figure 3.18.2-4 Confirmation Message**



**Figure 3.18.2-5 Topic**

**STEP 7**

Click on the  button to delete the record

**Note**

- System will display a Confirmation Message as Figure 3.14.2-6
- Click on the  button to delete the record

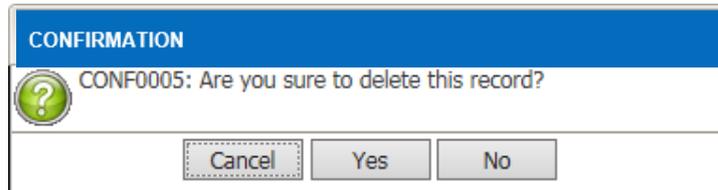
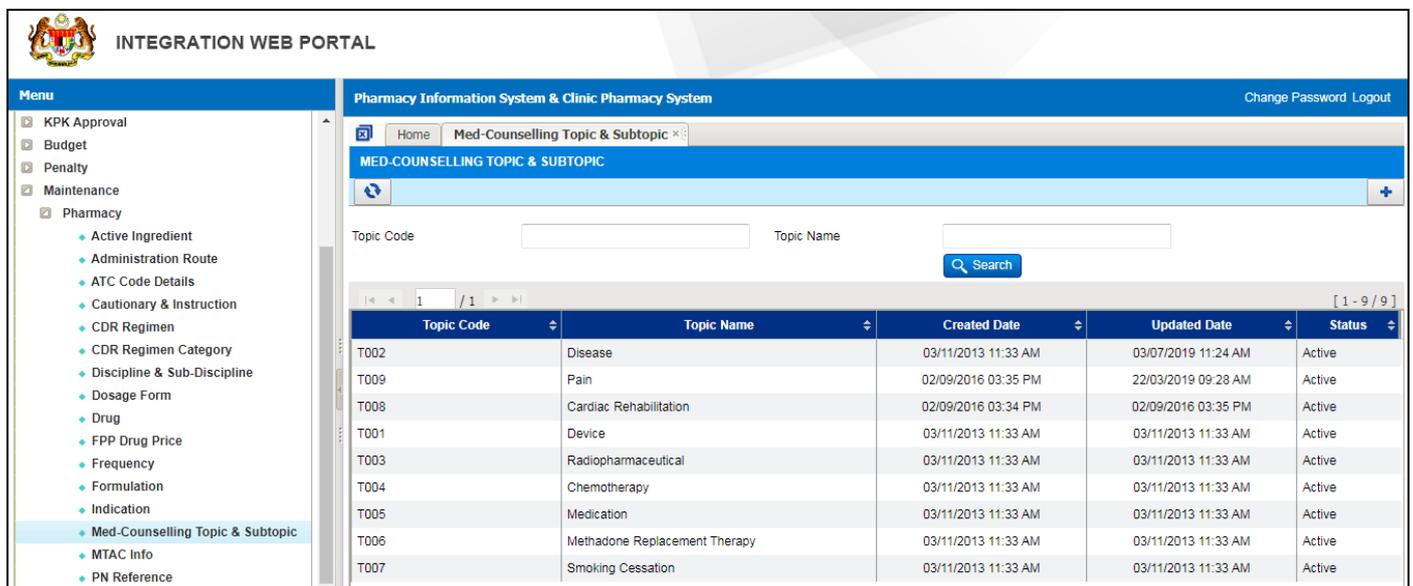


Figure 3.18.2-6 Confirmation Message

- The status of the record will be **Inactive** as figure 3.18.2-7



The screenshot shows the "INTEGRATION WEB PORTAL" interface. On the left is a "Menu" sidebar with various categories, including "Med-Counselling Topic & Subtopic" which is highlighted. The main content area is titled "Pharmacy Information System & Clinic Pharmacy System" and contains a search interface for "MED-COUNSELLING TOPIC & SUBTOPIC". Below the search fields is a table listing various topics.

Topic Code	Topic Name	Created Date	Updated Date	Status
T002	Disease	03/11/2013 11:33 AM	03/07/2019 11:24 AM	Active
T009	Pain	02/09/2016 03:35 PM	22/03/2019 09:28 AM	Active
T008	Cardiac Rehabilitation	02/09/2016 03:34 PM	02/09/2016 03:35 PM	Active
T001	Device	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T003	Radiopharmaceutical	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T004	Chemotherapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T005	Medication	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T006	Methadone Replacement Therapy	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active
T007	Smoking Cessation	03/11/2013 11:33 AM	03/11/2013 11:33 AM	Active

Figure 3.18.2-7 Med-Counselling Topic & Sub Topic

## 4.0 Acronyms

Abbreviation	Definition
MOH	Ministry of Health
KKM	Kementerian Kesihatan Malaysia
PhIS	Pharmacy Information System
CPS	Clinical Pharmacy System
PKU	Packaging Keeping Unit
SKU	Store Keeping Unit
BPF	Bahagian Perkhidmatan Farmasi
NPRA	National Pharmaceutical Regulatory Agency

## 5.0 Link to IWP Modules

No	Module	PDF Links
1	<i>Notification</i>	<a href="#">Click Here</a>
2	<i>Frequency Asked Question</i>	<a href="#">Click Here</a>
3	<i>Drug Information</i>	<a href="#">Click Here</a>
4	<i>Contract</i>	<a href="#">Click Here</a>
5	<i>KPK Approval</i>	<a href="#">Click Here</a>
6	<i>Maintenance – Pharmacy</i>	<a href="#">Click Here</a>
7	<i>Maintenance – Inventory</i>	<a href="#">Click Here</a>
8	<i>Maintenance – General</i>	<a href="#">Click Here</a>
9	<i>Maintenance – HQ Security</i>	<a href="#">Click Here</a>