



UNIVERSITI TEKNOLOGI MARA

**RETROSPECTIVE STUDY ON THE BLEEDING TENDENCY
AMONG WARFARIN PATIENTS AT HOSPITAL TUANKU
JA'AFAR SEREMBAN FROM AUGUST 2008 UNTIL NOVEMBER
2008**

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**DIPLOMA IN PHARMACY,
FACULTY OF PHARMACY,
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PULAU PINANG**

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ABSTRACT

Warfarin is the most widely used oral anticoagulant in the world for patients with venous thrombosis, pulmonary embolism, chronic atrial fibrillation, and prosthetic heart valves. The therapeutic index for individual patients is narrow; therefore, patients are closely monitored by international normalized ratio (INR) for prothrombin time (PT). Clinical use of warfarin is complicated due to variations in individual response, and prescribed doses may vary 20-fold or more because dose requirements, the stability of anticoagulation, and risk of bleeding are determined by a complex combination of environmental and genetic factors. Whereas non genetic factors, such as intake of vitamin K, disease, age, gender, concurrent medications, and body surface area, have been taken into consideration by clinicians, the genetic analysis still remains an underused tool, and clinicians must be further educated on how their patients can benefit from timely recognition of pharmacogenetic variations. This study which entitled 'Retrospective study of bleeding tendency among warfarin patients at Hospital Tuanku Ja'afar Seremban' is purposely to study and to know the percentage of patients who had bleeding problem after taking warfarin and counter the bleeding problem. We are going to study the cause of bleeding problems among patients who were taking warfarin and try to minimize the problem. We will achieve an appropriate range of INR for patient who taking warfarin. These studies are done in order to know the percentage of bleeding and non bleeding patients, to know the correlation between INR and bleeding incident and to monitor patient compliance. From this we expected to avoid undesirable bleeding that caused by warfarin, to achieve an appropriate range of INR for patient who taking warfarin and hope can achieve patients' compliance. This report outlined the introduction, literature, findings, analysis and conclusion based on observation, warfarin patient report, and record of warfarin patients from August 2008 until November 2008.

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TABLE OF CONTENTS

CONTENTS	PAGES
Acknowledgement	ii
Table of Contents	iii
List of Tables	vi
List of Figures	v
Abstract	vii
CHAPTER 1 INTRODUCTION	1
1.1 Definition of Warfarin	1
1.2 International Normalized Ratio (INR) and Prothrombin Time (PT)	1
1.3 Factors That Affect INR/PT Range	1
1.4 Factors Affecting INR Stability	2
1.5 Dietary Supplement and Herbal Medications	2
1.6 The Side Effects That May Occur To Patients Who Are Taking Warfarin	5
1.7 Usual Targeted INR Range	6
1.8 Maintenance Dosing of Warfarin	7
CHAPTER 2 LTERATURE REVIEW	8
2.1 Definition	8
2.2 Purpose	8
2.3 Description	8