#### Level of Plasma Factor VIIa-rTF in Ischemic Heart Disease

Thesis

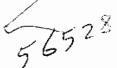
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ما سؤول

بسر الدالكي الكبر قالوا سبحانك لا علم لنا إلا ما علمتنا إنك أنت الهليم الحكيم

صحق الله اعظير سورة البقرة، آية ٣٢



# To my parents. & To my fiance

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### LIST OF ABBREVIATIONS

CAD Coronary artery disease

CHD Coronary heart disease

CVD Cardiovascular disease

DM Diabetes mellitus

DW Distilled water

FVIIag FVIII antigen

FVIIchr Chromogenic FVII

HDL High density lipoprotein

IDDM Insulin dependent diabetes mellitus

IHD Ischaemic heart disease

LDH Low density lipoprotein

KDa kilo Dalton

LCAT Lecithin-cholesterol acyl transferase

M.I Myocardial infarction

NIDDM Non-insulin dependent diabetes mellitus

TG Triglycerides

TF Tissue factor

TFPI Tissue factor pathway inhibitor

TRLP Tiglyceride rich lipoprotein particles

VLDL Very low density lipoprotein

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## Introduction

#### INTRODUCTION

Coagulation factor VII, or more correctly, the activated form (VIIa), occupies, a unique position as the first enzyme in the blood-clotting cascade. As such, it may play an important role in hypercoagulable states.

In fact, several epidemiologic studies have found elevated plasma factor VII coagulant activity (VIIc) to be an independent risk factor for heart disease.

However, factor VII exists in at least two, and possibly more, forms in plasma, and factor VIIc assays measure an aggregate of all of them. Therefore, there has been considerable controversy concerning which plasma forms of factor VII, if any, represent actual risk factors for thrombotic disease.

Several years ago it was proposed that low levels of factor VIIa might circulate normally in the plasma and that such trace levels of pre-existing factor VIIa may be essential in priming the coagulation cascade. Accordingly elevated actual risk factor being measured in epidemiological studies employing factor VIIc assays.

New assays techniques based on genetically engineered mutants of tissue factor (TF) now permit measurement of plasma factor VIIa without interference from the large excess of zymogen factor VII.

# Aim of the Work

#### AIM OF THE WORK

To evaluate the possible role of plasma factor VIIa as a risk predictor for coronary heart disease and to compare it with other risk factors.