



TABLE OF CONTENTS

APPROVAL SHEET	i
STATEMENT OF ORIGINALITY	ii
PREFACE	iii
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURES	vii
INTISARI	viii
ABSTRACT	ix
CHAPTER I INTRODUCTION	1
I.1. Background	1
I.2. Problem Formulation	4
I.3. Objective	4
I.4. Study Originality	4
I.5. Study Benefit	6
CHAPTER II LITERATURE REVIEW	7
II.1. High-Sensitivity C-Reactive Protein	7
II.2. Tumor Necrosis Factor-alpha	8
II.3. Inflammation Related to Cancer	10
II.4. Relation of hs-CRP and Cancer	12
II.5. Relation of TNF- α and Cancer	13



II.6. Nasopharyngeal Carcinoma.....	15
II.7. Basic Theory.....	17
II.8. Hypothesis.....	19
CHAPTER III RESEARCH METHODOLOGY.....	20
III.1. Type and Research Design.....	20
III.2. Time and Study Setting.....	20
III.3. Study Population and Subject.....	20
III.4. Sample Size.....	23
III.5. Study Variables and Operational Definition.....	24
III.6. Study Materials and Measurement.....	25
III.7. Data Analysis.....	29
III.8. Ethical Consideration.....	29
CHAPTER IV RESULT AND DISCUSSION.....	30
IV.1. Result.....	30
IV.2. Discussion.....	36
CHAPTER V CONCLUSIONS & SUGGESTIONS.....	44
V.1. Conclusions.....	44
V.2. Suggestions.....	44
REFERENCE.....	45



LIST OF TABLES

Table 1. List of studies on inflammatory markers in cancer patients.....	5
Table 2. Study Characteristics.....	31
Table 3. Distribution of CRP among NPC based on staging.....	35
Table 4. Distribution of TNF- α among NPC based on staging.....	35

LIST OF FIGURES

Figure 1. Theoretical Framework.....	18
Figure 2. Conceptual Framework.....	19
Figure 3. The dilution series of stock standard solution TNF- α	27
Figure 4.A. Distribution of CRP and TNF- α between healthy and NPC.....	33
Figure 4.B. Distribution of hs-CRP and TNF- α based on quartile on healthy and NPC.....	33