

TABLE OF CONTENTS

APPROVAL PAGE.....	i
AUTHENTICITY STATEMENT.....	ii
ACKNOWLEDGEMENT.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
ABBREVIATION LIST.....	ix
ABSTRACT.....	x
CHAPTER I INTRODUCTION.....	1
I.1. Background.....	1
I.2. Research Question.....	4
I.3. Research Objective.....	5
I.4. Research Authenticity.....	5
I.5. Research Benefit.....	6
CHAPTER II LITERATURE REVIEW.....	8
II.1. Literature Review.....	8
II.1.1. Anatomy of the Kidney.....	8
II.1.2. Histology of the Kidney.....	9
II.1.3. Physiology of the Kidney.....	10
II.1.4. Chronic Kidney Disease.....	12
II.1.5. ECE-1 and Tubular Injury in CKD....	13
II.2. Theoretical Framework.....	16

II.3. Conceptual Framework.....	17
II.4. Hypothesis.....	17
CHAPTER III RESEARCH METHOD.....	18
III.1. Study Design.....	18
III.2. Variables.....	18
III.3. Operational Definition.....	18
III.4. Equipments and Tools.....	19
III.5. Sample Selection and Sample Size.....	20
III.6. 5/6 Subtotal Nephrectomy Procedure.....	20
III.6.1. Surgical Preparation.....	20
III.6.2. Surgical Procedure and Closing....	21
III.7. Measurement and Collection Method.....	21
III.7.1. Measurement of ECE-1 Expression...22	
III.7.1.1. RNA and RT-PCR.....	24
III.7.1.2. Electrophoresis Steps.....	23
III.7.2. Measurement of Tubular Injury....	25
III.7.2.1. PAS Staining.....	25
III.8. Statistical Data Analysis.....	26
III.9. Ethics.....	26
CHAPTER IV RESULT AND DISCUSSION.....	28
IV.1. Research Result.....	28
IV.1.1. Data.....	28
IV.1.2. Tubular Injury Scoring.....	28
IV.1.3. ECE-1 Expression.....	31

IV.1.4. Correlation Between Tubular Injury	
Scoring and ECE-1 Expression.....	32
IV.2. Result Discussion.....	33
CHAPTER V CONCLUSION.....	38
V.1. Conclusion.....	38
V.2. Suggestions.....	38
REFERENCES.....	39
ENCLOSURE.....	42