

TABLE OF CONTENT

APPROVAL PAGE	ii
PLAGIATION FREE STATEMENT	iii
PREFACE	iv
TABLE OF CONTENT	vi
LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1	1
INTRODUCTION	1
1.1 Background	1
1.2 Problem Formulation	3
1.3 Research Objectives.....	3
1.4 Research Benefits.....	3
CHAPTER 2 LITERATURE REVIEW	5
2.1 Prostate Cancer	5
2.2 Benign Prostate Hyperplasia.....	7
2.3 Messenger RNA (mRNA).....	8
2.4 ZEB-1 (Zinc finger E-box-binding homeobox 1)	9
2.5 E-cadherin	10
2.6 EMT (Epithelial-Mesenchymal Transition).....	11
2.7 Hypothesis.....	13
2.8 Theoretical Framework.....	14
2.9 Conceptual Framework.....	15
CHAPTER 3 RESEARCH METHODOLOGY	16
3.1 Research Design.....	16
3.2 Location of Study.....	16
3.3 Population and Subject of Research.....	16
3.4 Variable of Research.....	17
3.5 Instrument of Research	17
3.6 Data Collection	18
3.7 Data Analyze.....	19



3.8	Procedure of Research	19
CHAPTER 4 RESULT AND DISCUSSION		23
4.1	Descriptive Analysis	23
4.2	Bivariat Analysis.....	24
4.2.1	Correlation Test ZEB-1/ β -ACTIN and E-Cadherin/ β -ACTIN in BPH	28
4.2.2	Correlation Test ZEB-1/ β -ACTIN and E-Cadherin/ β -ACTIN in Prostate Cancer.....	29
4.3	Discussion.....	29
CHAPTER 5 CONCLUSION AND SUGGESTION		33
5.1	Conclusion	33
5.2	Suggestion.....	33
REFERENCES.....		34



LIST OF FIGURES

Picture 1. Prostate Cancer Molecular Pathway	5
Picture 2. Benign Prostate Hyperplasia.....	7
Picture 3. DNA, RNA, and protein molecular pathway.....	9
Picture 4. Showed Zeb1 in EMT pathway	10
Picture 5. Several EMT pathway	13
Picture 6. Theoretical Framework	14
Picture 7. Conceptual Framework.....	15
Picture 8. Result from ZEB1/ β -ACTIN and E-CADHERIN/ β -ACTIN	25
Picture 9. Mean ratio of ZEB1/ β -ACTIN and E-CADHERIN/ β -ACTIN.....	26



LIST OF TABLES

Table 1. Primer of mRNA used in this experiment.....	18
Table 2. Descriptive Analysis	24
Table 3. Showing the result form ImageJ	24
Table 4. Test of normality using Shapiro-Wilk	27
Table 5. Correlation Test ZEB-1/ β -ACTIN and E-Cadherin/ β -ACTIN in BPH	28
Table 6. Correlation Test ZEB-1/ β -ACTIN and E-Cadherin/ β -ACTIN in Pca	29