

# CONTENTS

	<b>Title</b>	<b>Pages</b>
I.	Preface	1 – 2
II.	Review of Literature	
	1. Gestational Trophoblastic Disease	3 – 30
	2. Epidermal Growth Factor Receptor	31 – 49
III.	Rationale of the study	50 – 51
IV.	Materials and methods	52 – 74
V.	Molecular Level Alterations of EGFR in GTD	
	1. Protein expression of EGF Receptor	75 – 84
	2. Active status of the EGF Receptor	85 – 90
	3. EGFR gene amplification	91 – 99
	4. Mutations in EGFR extracellular domain	100 – 112
VI.	Functional Level Alterations of EGFR in GTD	
	1. Downstream pathways activated by EGFR in GTD	113 – 122
	2. Defective apoptosis and Akt activation	123
	(1). Apoptosis in GTD	124 – 128
	(2). Expression of apoptotic proteins	129 – 137
	3. EGFR-Akt mediated cell survival in GTD	138 – 146
VII.	Serum ECD levels of EGFR in GTD	147 – 152
VIII.	Salient Findings	153
IX.	Summary and Conclusions	154 – 156
X.	References	157 – 189
XI.	Appendix	190 – 193
XII.	List of Publications/Presentations	194