

CONTENTS

CHAPTER	DESCRIPTION	PAGE NO.
	LIST OF ABBREVIATIONS	i
	LIST OF TABLES	ii
	LIST OF FIGURES	iii- iv
	ABSTRACT	v
1.	INTRODUCTION Objectives of the study	1 6
2.	REVIEW OF LITERATURE 2.1 Characterization of CYP26 family member. 2.2 Molecular and physiological function of CYP26 2.3 Retinoic acid metabolizing enzyme CYP26A1 and its role in human cancer. 2.4 Mutation of CYP26A1 in humans 2.5 Study of drug- retinoid interactions. 2.6 Inhibition of the catalytic activity of CYP26A1 by specific compounds.	7 9 14 16 18 20
3.	MATERIALS AND METHODS 3.1 Materials 3.2 Methodology 3.2.1 Identification of target protein CYP26A1 using <i>in silico</i> proteome analysis 3.2.2 Structure prediction and validation of target protein CYP26A1 3.2.3. Virtual screening of modeled target protein CYP26A1 against literature driven drug library 3.2.4 Protein-ligand interaction through docking 3.2.5 Evaluation of drug potency as CYP26A1 inhibitor	22 26 27 30 33 36 38

Contd..

4.	<p>RESULTS AND DISCUSSION</p> <p>4.1 Identification and analysis of target protein CYP26A1</p> <p>4.2 Analysis of structure prediction and validation of target protein</p> <p>4.3 Analysis of virtual screening of modeled target protein CYP26A1 against literature driven drug library</p> <p>4.4 Analysis of protein-ligand interaction through docking</p> <p>4.5 Evaluation of drug potency</p>	<p>39</p> <p>47</p> <p>65</p> <p>69</p> <p>73</p>
5.	SUMMARY AND CONCLUSION	77
	REFERENCES	83
	APPENDICES	vi-xii
	PUBLISHED RESEARCH PAPERS	