

## LIST OF TABLES

Sr. No.	Title	Page no.
<b>CHAPTER I</b>	<b>Introduction</b>	
Table 1	Sources of ROS in vitiligo	18
Table 2	Downstream effects of ROS in vitiligo	20
Table 3	Candidate genes for vitiligo susceptibility	41
Table 4	<i>CAT</i> SNPs and their associated diseases	45
Table 5	<i>GPXI</i> SNPs and their associated diseases	49
Table 6	<i>G6PD</i> SNPs and their associated diseases	50
<b>CHAPTER II</b>	<b>Genetic association of glutathione peroxidase 1 (<i>GPXI</i>) gene polymorphisms with vitiligo susceptibility</b>	
Table 1	Demographic characteristics of Gujarat vitiligo patients and controls	108
Table 2	Primers and restriction enzymes used for genotyping of <i>GPXI</i> exon 1 G/C (rs8179169); exon 1 T/C (rs4991448) and exon 2 C/T (rs6446261) SNPs	109
Table 3	Association of <i>GPXI</i> exon 1 G/C (rs8179169), T/C (rs4991448) and exon 2 C/T (rs6446261) polymorphisms in vitiligo patients from Gujarat	120
Table 4	Association of <i>GPXI</i> exon 1 G/C (rs8179169) T/C (rs4991448) polymorphisms in patients with active and stable vitiligo from Gujarat	121
Table 5	Association of <i>GPXI</i> exon 1 G/C (rs8179169) and T/C (rs4991448) polymorphisms in patients with generalized and localized vitiligo from Gujarat	122
Table 6	Association of <i>GPXI</i> exon 1 G/C (rs8179169) and T/C (rs4991448) polymorphisms in male and female vitiligo patients from Gujarat	123
Table 7	Distribution of haplotypes frequencies for <i>GPXI</i> exon 1	123

	G/C (rs8179169) and T/C (rs4991448) polymorphisms in vitiligo patients and controls	
Table 8	<i>In silico</i> prediction analysis for <i>GPX1</i> polymorphisms	128
<b>CHAPTER III</b>	<b>Genetic association of catalase (CAT) gene polymorphisms with vitiligo susceptibility</b>	
Table 1	Demographic characteristics of vitiligo patients and unaffected controls recruited for skin and blood sample collection	145
Table 2	Primers and restriction enzymes used for genotyping of <i>CAT</i> polymorphisms and expression	147
Table 3	Distribution of genotype and allele frequencies for <i>CAT</i> polymorphisms in Gujarat vitiligo patients and controls	151
Table 4	Distributions of genotype and allele frequencies of <i>CAT</i> polymorphisms in different subsets of vitiligo patients and controls	152
Table 5	Distribution of haplotype frequencies for <i>CAT</i> promoter - 262 G/A (rs1001179); -89 A/T (rs7943316); 5'-UTR -20 T/C (rs1049982) polymorphisms in Gujarat vitiligo patients and controls	154
<b>CHAPTER IV</b>	<b>Genetic association of glucose-6-phosphate dehydrogenase (G6PD) gene polymorphisms with vitiligo susceptibility</b>	
Table 1	Demographic characteristics of vitiligo patients and unaffected controls recruited for skin and blood sample collection	175
Table 2	Primers and restriction enzymes used for genotyping of <i>G6PD</i> polymorphisms and expression	177
Table 3	<i>In silico</i> prediction analysis for <i>G6PD</i> polymorphisms	183
Table 4	miRNA target prediction	184
Table 5	Distribution of genotype and allele frequencies for <i>G6PD</i>	188

	polymorphisms in Gujarat vitiligo patients and controls	
Table 6	Distributions of genotype and allele frequencies of <i>G6PD</i> 3'UTR polymorphism in different subsets of vitiligo patients and controls	189
<b>CHAPTER V-A</b>	<b>Skin miRNA profiling of non-segmental vitiligo patients</b>	
Table 1	Demographic characteristics of non-segmental vitiligo patients and unaffected controls	203
Table 2	Differentially expressed miRNAs in lesional skin from non-segmental vitiligo patients compared to controls and non-lesional skin from patients	208
Table 3	Differentially expressed miRNAs in non-lesional skin from non-segmental vitiligo patients compared to controls	209
<b>CHAPTER V-B</b>	<b>miRNA signatures and transcriptional regulation of their target genes in vitiligo</b>	
Table 1	Demographic characteristics of vitiligo patients and unaffected controls recruited for skin and blood sample collection	225
Table 2	Details of primers used for expression of miRNA target genes	228
Table 3	miRNA target prediction	233
Table 4	Expression of miRNAs and their target genes in vitiligo patients and controls	238
<b>CHAPTER VI</b>	<b><i>In vitro</i> study on effect of oxidative stress on melanocytes</b>	
Table 1	Details of primers used for mRNA expression of the candidate genes	266