

## List of tables

Sr No	Title	Page No
<b>Chapter 1 Introduction</b>		
1.1	Characteristics of prediabetes	8
1.2	Clinical characteristics of T1D and T2D patients	9
1.3	Criteria for the diagnosis of diabetes	9
1.4	Association of <i>resistin</i> genetic variants with various disorders	17
1.5	Association of <i>vaspin</i> rs2236242 A/T with various disorders	20
1.6	Characteristics of the most widely used oral antidiabetic drugs	24
1.7	Stimulation of $\beta$ -cell proliferation by GABA or GABA-receptor agonist	30
<b>Chapter 2 To study the role of Resistin in Type 2 Diabetes</b>		
2.1	Primers and restriction enzymes (REs) used for genotyping of resistin gene polymorphisms	43
2.2	Clinical characteristics of the controls and T2D patients	45
2.3	Genotype and allele frequencies distribution of <i>resistin</i> polymorphisms in controls and T2D patients	46
2.4	Distribution of haplotype frequencies of <i>resistin</i> in controls and T2D patients	47
2.5	Genotype-phenotype association analyses of <i>resistin</i> polymorphisms with metabolic profile	48
2.6	Correlation analysis of plasma resistin protein levels with the metabolic profile	49
2.7	Association of <i>resistin</i> rs1862513 CC genotype with various disorders	50
<b>Chapter 3 To study the role of Omentin-1 in Type 2 Diabetes</b>		
3.1	Primers and restriction enzymes (REs) used for genotyping for the studied polymorphisms and expression of omentin-1 gene	62
3.2	Clinical characteristics of the controls and T2D patients	64
3.3	Genotype and allele frequencies distribution of <i>omentin-1</i> polymorphisms in controls and T2D patients	65
3.4	Distribution of haplotype frequencies of <i>omentin-1</i> in controls and T2D patients	66
3.5	Genotype-phenotype association analyses of <i>omentin-1</i> polymorphisms with metabolic profile	66
3.6	Correlation analysis of <i>omentin-1</i> transcript levels with the metabolic profile	67
3.7	Correlation analysis of plasma omentin-1 protein levels with the metabolic profile	68
<b>Chapter 4 To study the role of Vaspin in Type 2 Diabetes</b>		
4.1	Primers and restriction enzymes (REs) used for genotyping for the studied polymorphisms and expression of vaspin gene	77
4.2	Clinical characteristics of the controls and T2D patients.	80
4.3	Genotype and allele frequencies distribution of <i>vaspin</i> polymorphisms in controls and T2D patients	81

4.4	Distribution of haplotype frequencies of <i>vaspin</i> in controls and T2D patients	82
4.5	Genotype-phenotype association analysis of <i>vaspin</i> polymorphisms with metabolic profile.	83
4.6	Correlation analysis of <i>vaspin</i> transcript levels with the metabolic profile.	84
4.7	Correlation analysis of plasma <i>vaspin</i> with the metabolic profile.	84
4.8	Association of <i>vaspin</i> rs2236242 A/T with various disorders	85
<b>Chapter 5 To investigate the effect of GABA, CR and combination treatment on pancreatic <math>\beta</math>-cell proliferation in HFD + STZ induced experimental mouse model</b>		
5.1	Primers used for the transcript analysis	96
5.2	Antibodies used for the IHC studies	98