

## ABBREVIATIONS

1. ACE- Angiotensin Converting Enzyme
2. ADA- American Diabetes Association
3. AGE - Advanced Glycation End-product
4. ALX- Alloxan
5. AR - Aldose reductase
6. AT II- Angiotensin II
7. AVR- Arterio-Vnule ratio
8. BMI - Body Mass Index
9. BW- Body weight
10. CAD- Coronary Artery Disease
11. CaOx- Calcium oxalate
12. CAT- Catalase
13. CVD- Cerebro Vascular Disease
14. DAG - Diacylglycerol
15. DC- Diabetic control
16. DCCT- Diabetes Complications and Control Trial
17. DKA - Diabetic Keto Acidosis
18. DM – Diabetes Mellitus
19. DM+Glib- Glibenclamide treated Diabetic rats
20. DM+PM250- Diabetic rats – *P.marsupium* 250mg/kg body weight
21. DM+PM500- Diabetic rats – *P.marsupium* 500mg/kg body weight
22. DM+TT150- Diabetic rats – *T.terrestris* 150mg/kg body weight
23. DM+TT300- Diabetic rats – *T.terrestris* 300mg/kg body weight
24. DMGlib+PM250- Glibenclamide and *P.marsupium* 250mg/kg treated diabetic rats
25. DMGlib+TT150- Glibenclamide and *T.terrestris* 150mg/kg treated diabetic rats
26. DPP-4 – Dipeptidyl peptidase-4
27. DR - Diabetic retinopathy
28. DTNB- 5,5'- dithio 2-bis nitrobenzoic acid
29. eNOS - endothelial Nitric Oxide Synthase

30. ER- Endoplasmic reticulum
31. ESRD - End Stage Renal Disease
32. FA- Fatty Acids
33. FADH<sub>2</sub>- Flavin adenine dinucleotide
34. FBS- Fasting Blood Sugar
35. FDA - Food and Drug Administration
36. FFA/FFAs - Free Fatty Acids
37. FPG - Fasting Plasma Glucose
38. GAPDH - Glyceraldehyde-3-phosphate dehydrogenase
39. GFR - Glomerular filtration rate
40. GGT- Gamma Glutamyl Transferase or Gamma Glutamyl Transpeptidase
41. GlcNAc - *N*-acetylglucosamine
42. GLDH – Glutamate dehydrogenase
43. GLUT-4 – Glucose transporter-4
44. GPO – Glycerol – 3 –phosphate oxidase
45. GSH - Reduced glutathione
46. HbA<sub>1c</sub>- Glycated hemoglobin
47. HCl- Hydrochloric acid
48. HDL-C- High density lipoprotein
49. HEPES-Na - 2-[4-(2-hydroxy ethyl)-1- piperazinyl]- ethanesulphonic acid sodium salt
50. IDDM - Insulin-dependent diabetes mellitus
51. IDF- International diabetes federation
52. IRR- Insulin receptor-related receptor
53. IR- Insulin resistance
54. LDL - Low density lipoproteins
55. LPO - Lipid peroxidase
56. MAPK - Mitogen activated protein kinase
57. MHC-II- Major histocompatibility complex-II
58. MI- Myo-inositol
59. MnSOD - Manganese superoxide dismutase
60. MWM- Morris Water Maze

61. NaCl- Sodium chloride
62. NaOH- Sodium hydroxide
63. NC- Normal control
64. ND+PM250- Non-diabetic rats – *P.marsupium* 250mg/kg body weight
65. ND+PM500- Non-diabetic rats – *P.marsupium* 500mg/kg body weight
66. ND+TT150- Non-diabetic rats – *T.terrestris* 150mg/kg body weight
67. ND+TT300- Non-diabetic rats – *T.terrestris* 300mg/kg body weight
68. NIDDM – Non Insulin Dependent Diabetes Mellitus
69. NO- Nitric oxide
70. OGTT - Oral glucose tolerance test
71. *P.marsupium*- *Pterocarpus marsupium*
72. PAI-1- Plasminogen activator inhibitor-1
73. PARP- Poly(ADP-ribose) polymerase
74. PI-3K - Phosphatidylinositol- 3-kinase
75. PKC - Protein kinase C
76. PPAR  $\gamma$  - Peroxisome proliferator—activated receptor gamma
77. PVD - Peripheral Vascular Disease
78. RBG – Random Blood Glucose
79. ROS - Reactive oxygen species
80. ScN- Sciatic nerve
81. SDH - Sorbitol dehydrogenase
82. SOD - Superoxide dismutase
83. STAT3-SOCS3- Signal transducer and activator of transcription 3- suppressor of cytokine signaling 3
84. STZ- Streptozotocin
85. *T.terrestris*- *Tribulus terrestris*
86. TBARS - Thiobarbituric acid reacting substances
87. TC- Total Cholesterol
88. TG- Triglycerides
89. TGF- $\beta$  - Transforming growth factor- $\beta$
90. TIMP-1- Tissue inhibitor of metalloproteinases-1

91. TL- Transfer latency
92. TTP- Time taken to reach platform
93. TZDs- Thiazolidinediones
94. UCP-1 - Uncoupling protein-1
- 95. UKPDS - United Kingdom Prospective Diabetes Survey**
96. VEGF- Vascular endothelial growth factor
97. VLDL - Very low density lipoproteins
98. WHO- World Health Organisation