

**SOLUBLE RECEPTOR FOR ADVANCED GLYCATION END
PRODUCTS IN CHILDREN AND ADOLESCENTS
WITH TYPE 1 DIABETES MELLITUS: POSSIBLE
ASSOCIATION WITH DIABETIC VASCULAR COMPLICATIONS**

Thesis

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Master degree *in Pediatrics*

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ذلك بمضاعفات مرض السكر على الأوعية الدموية

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List of Abbreviations

ACE	Angiotensin converting enzyme
ACEI	Angiotensin converting enzyme inhibitor
ADA	American Diabetes Association
ADAM10	A disintegrin and metalloprotease10
AER	Albumin excretion rate
AGEs	Advanced glycation end products
APCs	Antigen presenting cells
ApoA-IV	Apolipoprotein A-IV
APS 1	Autoimmune polyendocrine syndrome type 1
ARB	Angiotensin receptor blockers
BG	Blood glucose
BMI	Body Mass Index
CAC	Coronary artery calcification
CAD	Coronary artery disease
cat	Category
CCA	Common carotid artery
CD	Cluster of differentiation
Cdc42	Cell division cycle 42 protein
CHD	Coronary heart disease
cIMT	Carotid intima-media thickness
CML	N-Carboxymethyllysine

List of Abbreviations

CV	Cardiovascular
CVD	Cardiovascular disease
DBP	Diastolic Blood Pressure
DCCT	Diabetes Control and Complication Trial
DKA	Diabetic ketoacidosis
DNA	Deoxyribonucleic acid
DPT-1	Diabetes Prevention Trial-1
ECs	Endothelial cells
EDIC	Epidemiology of Diabetes Intervention and Complication
ELISA	Enzyme-linked immunosorbent assay
eNOS	Endothelial nitric oxide synthase
esRAGE	Endogenous secretory receptor for advanced glycation end products
ESRD	End stage renal disease
FFA	Free fatty acids
FMD	Flow mediated dilatation
GAD	Glutamic acid decarboxylase
HbA1c	Glycated hemoglobin
HDL	High density lipoproteins
HDL- C	High density lipoprotein-cholesterol
HHS	Hyperglycemic hyperosmolar state
HLA	Human leukocyte antigen
HMGB 1	High mobility group box 1

List of Abbreviations

HNF	Hepatocyte nuclear factor
HPLC	High purified liquid chromatography
HRP	Horseradish peroxidase
IA-2	Islet antigen 2
IAA	Insulin autoantibodies
ICA	Islet cell antibody
ICA	Internal carotid artery
ICAM-1	Intercellular adhesion molecule-1
IDDM	Insulin dependent diabetes mellitus
IFN- γ	Interferon- gamma
IL	Interleukin
IMT	Intima-media thickness
INGAP	Islet neogenesis associated proteins
IPF	Insulin promoter factor
IQR	Inter-quartile range
IRMA	Intra-retinal microvascular abnormalities
ISPAD	International Society of Pediatric and Adolescents Diabetes
KCNJ II	Potassium inwardly-rectifying channel, subfamily J, member II
LDL	Low density lipoproteins
LDL-C	Low density lipoprotein cholesterol
Leu7Pro	Leucine to praline polymorphism
MAC-1	Macrophage-1 glycoprotein (cD11B/CD18)

List of Abbreviations

MAP	Mitogen-activated protein
MHC	Major histocompatibility complex
MHz	Mega Hertz
MI	Myocardial infarction
MMP	Matrix metalloproteinase
MODY	Maturity onset diabetes of the young
mRNA	Messenger ribonucleic acid
N	Numbers
NAD	Nicotinamide adenine dinucleotide
NADPH	Nicotine amine dinucleotide phosphate
NF-KB	Nuclear factor kappa B
NGSP	National Geographic School Publishing
NMR	Nuclear magnetic resonance
NO	Nitric oxide
PAI-1	Plasminogen activator inhibitor type 1
RAGE	Receptor for advanced glycation end products
RAS	Rennin-angiotensin system
Reg3	Regenerating islet-derived 3
ROC	Receiver operator characteristic
ROS	Reactive oxygen species
S100	S100-Calcium binding protein
SBP	Systolic Blood Pressure
SD	Standard deviation

List of Abbreviations

SMBG	Self-monitoring of blood glucose
SPSS	Statistical package for social sciences
sRAGE	Soluble Receptor for advanced glycation end products
T1DM	Type 1 diabetes mellitus
T2DM	Type 2 diabetes mellitus
TG	Triglycerids
TGF-B	Transforming growth factor-B
TH	T helper
TMB	Tetra methyl benzdine
TNF- α	Tumor necrosis factor alpha
UAE	Urinary albumin excretion
VEGF	Vascular endothelial growth factor
VLDL	Very low density lipoproteins
WHO	World Health Organization
wk	Week
yrs	Years

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