

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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وَعَلَّمَكَ مَا لَمْ تَكُن تَعْلَمُ
وَكَانَ فَضْلُ اللَّهِ عَلَيْكَ
عَظِيمًا

صلى الله عليه وسلم

سورة النماء

***The study of polymorphism in exon I
of the CD152 gene in association with
Systemic Lupus Erythematosus***

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in Clinical and Chemical Pathology

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Abstract

We studied thirty patients **with** Systemic lupus erythematosus (SLE) **and** ten healthy control subjects .Our work aimed at studying polymorphism of the CD152 exon-1 gene in association with SLE. Our study showed a higher prevalence of G/G genotype of CD152 exon-1 +49 in patients than in the control subjects [25 cases(83.3%) versus 2 control subjects(20%)]; p-value <0.05 indicating statistical significance and that patients with G/G genotype of CD152 exon-1 +49 are more susceptible to develop SLE .

Key Words : Systemic lupus erythematosus, CD152.

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Arabic Summary

List of Abbreviations

Ab	:	Antibody
Ala	:	Alanine
ANCA	:	Anti-neutrophil cytoplasmic antibodies
Anti-ds-DNA	:	Anti-double stranded deoxyribonucleic acid
APC	:	Antigen-Presenting Cell
APS	:	Antiphospholipid syndrome
CD	:	Cluster of differentiation
CTLA-4	:	Cytotoxic T lymphocyte associated antigen-4
ENA	:	Extractable nuclear antigen
FOXP3	:	Forkhead box P3
gp	:	Glycoprotein
HIV-1 Vpr	:	Human immunodeficiency virus Viral Protein R
IDDM	:	Insulin-dependent diabetes mellitus
IFN- α	:	Interferon- α
Ig	:	Immunoglobulin
IL	:	Interleukin
MHC	:	Major histocompatibility complex
NMD	:	N-methyl-d-aspartate
PCR-RFLP	:	Polymerase chain reaction restriction fragment length polymorphism
RNP	:	Ribonucleoprotein
sCTLA-4	:	Soluble cytotoxic T lymphocyte associated antigen-4
SLE	:	Systemic lupus erythematosus
TCR	:	T-cell receptor
Thr	:	Threonine
TNF- α	:	Tumor necrosis factor-alpha
Treg	:	Regulatory T cells
U3' UTR	:	Three prime untranslated region
vs	:	Versus

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Introduction

Systemic lupus erythematosus is a prototype of systemic autoimmune diseases; it is a fatal multisystem autoimmune disease, characterized by immunoglobulin G autoantibody production against a variety of antigens. Inappropriate T-cell-dependent expansion of autoreactive B-cells is considered to play a role in the production of pathogenic autoantibodies against nuclear, cytoplasmic, and cell-surface autoantigen (*Kotzin, 1996*).

Multiple genetic and environmental factors are involved in the pathogenesis of systemic lupus erythematosus (*Vyse and Kotzin , 1998*).