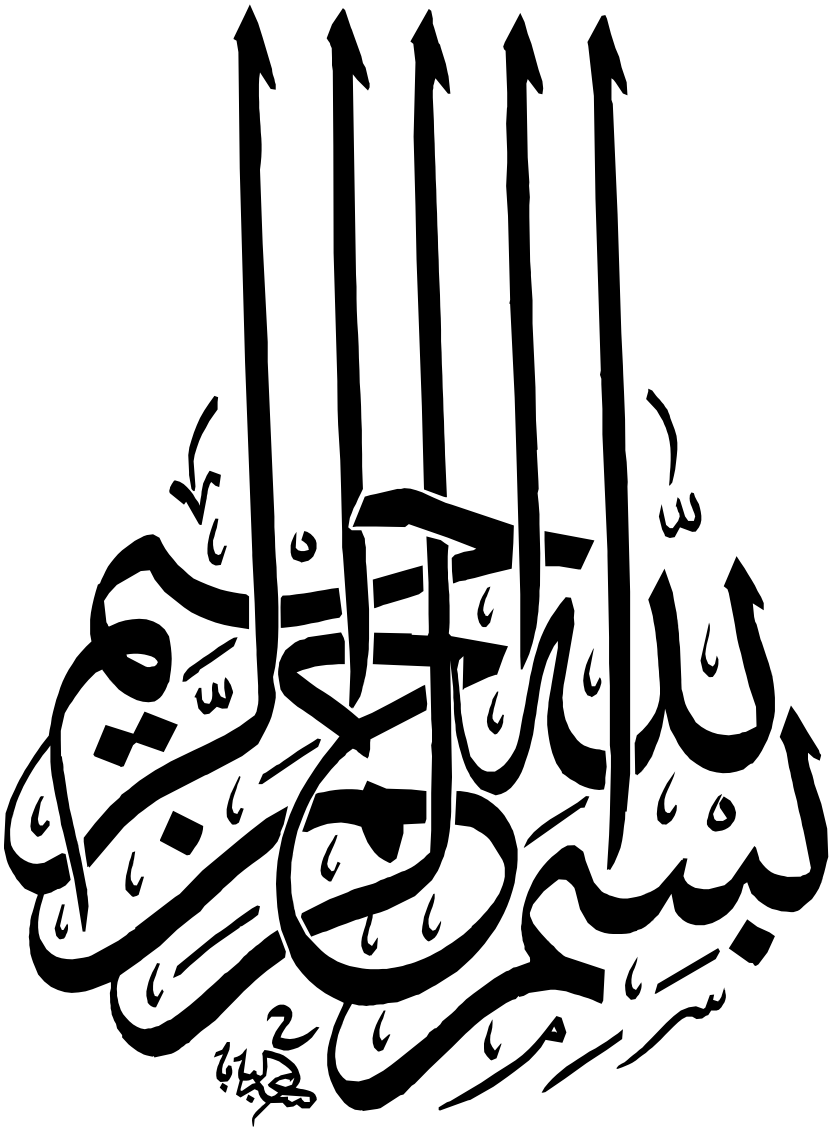
بسم الله الرحمن الرحيم

وَعَلَّمَكَ مَا لَمْ تَكُنْ تَعْلَمُ وَكَانَ فَضْلُ اللَّهِ عَلَيْكَ عَظِيمًا

صدق الله العظيم

سورة النساء

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

Thesis Submitted for Fulfillment of M.D.Degree
in Clinical and Chemical Pathology

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دراسة التعدد الجينى لاكسيون - 1 فى سى د 152 جين و علا قته بالذئبة الحمراء .

رسالةمقدمه من

الطبيبة / أمل حسين خليل عيسى

توطئة للحصول على درجه الدكتوراة

فى الباثولوجيا الاكلينيكية والكيميائية

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Amal H. Eissa

Abstract

We studied thrity 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.

Contents

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. In-appropriate 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*).***