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**Potential Association Between Single
Nucleotide Polymorphisms-in the Genes
of the Human Toll-like Receptors “TLR2
and TLR9” of Certain Defensive Cells-
and the Susceptibility to Pulmonary
Tuberculosis in Egyptian Patients**

Thesis Submitted for Ph.D. Degree in Science

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List of Abbreviations

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AFB:	Acid-Fast Bacilli
AG:	Arabinogalactan
ARMS-PCR:	Amplification-Refractory Mutation System-PCR
BCG:	Bacilli Calmette-Guerin
CD4:	Cluster of Differentiation 4
CFP:	Culture Filtrate Protein
CI:	Confidence Interval
CpG:	Cytosine precedes Guanine
DCs:	Dendritic Cells
DNA:	Deoxyribonucleic Acid
EBV:	Epstein-Barr virus
EDTA:	Ethylene diamine tetra acetic acid
EPTB:	Extrapulmonary Tuberculosis
ESAT-6:	Early Secretory Antigenic Target
GPI:	Glycosylphosphatidylinositol
HCS:	Highly Conserved Segment
HIV:	Human Immunodeficiency Virus
IGRA:	Interferon-Gamma Release Assay
IM:	Infectious Mononucleosis
INF:	Interferon
IRAK:	IL-1 Receptor-Associated Kinases
IRF-3:	Interferon Regulatory Factor 3
IS6110-RFLP:	IS6110 Restriction Fragment Length Polymorphism
IκB:	IkappaB kinase
IKK:	Inhibitor of nuclear factor Kappa-B Kinase
LAM:	Lipoarabinomannan

List of Abbreviations

LD:	Linkage Disequilibrium
LED:	Light-Emitting Diode
LM:	Lipomannan
LPS:	Lipopolysaccharide
LRRs:	Leucine-Rich Repeats
LSPs:	Large Sequence Polymorphisms
LTA:	Lipoteichoic Acid
MA:	Mycolic acids
mAGP:	Mycolylarabinogalactan-peptidoglycan
Man-LAM:	Mannose-capped lipoarabinomannan
MAP:	Mitogen-Activated Protein
MDR-TB:	Multidrug-Resistant Tuberculosis
MOHP:	Ministry of Health and Population
MTB:	<i>Mycobacterium tuberculosis</i>
MTBC:	<i>Mycobacterium tuberculosis</i> Complex
MyD88:	Myeloid Differentiation primary response 88
NAATs:	Nucleic Acid Amplification Tests
NF:	Nuclear Transcription Factor
NF-κB:	Nuclear factor kappa B
NKT:	Natural killer T cells
NLR:	Nucleotide-binding oligomerization domain-like receptor
OR:	Odds Ratio
PAMPs:	Pathogen-associated molecular patterns
PCR:	Polymerase Chain Reaction
PDIM:	Phthiocerol dimycocerosate
PG:	Peptidoglycan
PGL:	Phenolic Glycolipids

List of Abbreviations

PIMs:	Phosphatidylinositol mannosides
PRRs:	Pattern Recognition Receptors
PTB:	Pulmonary Tuberculosis
RANTES:	Regulated upon Activation, Normal T Cell Expressed and Secreted
RD1:	Region of Deletion1
RFLP:	Restriction Fragment Length Polymorphism
RNI:	Reactive Nitrogen Intermediates
ROI:	Reactive Oxygen Intermediates
RS:	Reference SNP
SLE:	Systemic Lupus Erythematosus
SNPs:	Single Nucleotide Polymorphisms
STM:	Signature Tagged Mutagenesis
TAK1:	TGF β -Activated protein Kinase 1
TB:	Tuberculosis
TDM:	Trehalose-6,6'-Dimycolate
TIR:	Toll/IL-1 Receptor
TIRAP:	Toll-interleukin 1 receptor domain containing adaptor protein
TLR:	Toll-like receptor
TNF:	Tumor Necrosis Factor
TRAF:	TNF Receptor-associated Factor
TRIF:	Toll-like receptor-domain-containing adapter-inducing interferon- β
TST:	Tuberculin Skin Test
USAID:	United States Agency for International Development
VS:	Variable Segment
WGS:	Whole Genome Sequencing
WHO:	World Health Organization

