# Assessment of Quality of Life in Patients with Systemic Lupus Erythematosus (Ain Shams Lupus Cohort)□

#### Thesis

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## **LIST OF ABBREVIATIONS**

Abbrev.	Full Term
ACE	Angiotensin converting enzyme inhibitors
ACL	Anticardiolipin
ACR	American college of rheumatology
<b>AGDS</b>	Acute gastrointestinal distress syndrome
AHA	Autoimmune hemolytic anemia
AIMS	Arthitis impact measurement scale
<b>ANA</b>	Anti-nuclear antibody
Anti BLys	Anti-B-lymphocyte stimulator
Anti CCP	Anti-citrultine containing peptile
Anti-DNA	Anti double strandit DNA antibodies
<b>APC</b>	Antigen presenting cell
APS	Antiphospolipid syndrome
ARBs	Angiotensin receptor blockers
<b>AVN</b>	A vascular necrosis
<b>AZA</b>	Azathioprine
<b>BAFF</b>	B cell activating factor
<b>BILAG</b>	Britsh isles lups assessment group
CLE	Cutaneous lupus erythematosus
<b>CMV</b>	Cytomegalovirus
CNS	Central nervous system
<b>CPV</b>	Creatine phosphokinase
CRP	C-reactive protein
<b>CSA</b>	Cyclosporin A

# LIST OF ABBREVIATIONS (CONT.)

Abbrev.	Full Term
<b>CT</b>	. Computed tomography
CTLA UIQ	. Cytotoxic-T-lymphocyte-associated antigen
CVD	. Cardiovascular disease
CYC	. Cyclophosphamide
<b>DHEA</b>	. Dehydroepiandrosterone
DILE	. Drug induced lupus erythematosus
DMARDS	. Disease-modifying antirheumatic drugs
<b>DRVVT</b>	. Dilute russel viper venous time
<b>EBV</b>	. Epstein – barr virus
ECLAM	European community lupus activity measure
EQ-5D	. European QOL scale
ESR	. Erythrocyte sedimentation rate
FDA	. Food drug administration
G6PD	. Glucose-6-phosphate dehydrogenase deficiency
<b>GFR</b>	. Glomerular filtration rate
GI	. Gastrointestinal
HAQ	. Health assessment questionnaire
HCQ	. Hydroxychloroguine
HRQOL	. Health related quality of life
IFN	. Interferon
ISN/RPS	. International society of nephrology/renal pathology society

# LIST OF ABBREVIATIONS (CONT.)

Abbrev.	Full Term
IVIG	Intravenous immunoglobulin
LDH	Lactate dehydrogenase
LJP	La Jolla Pharmaceuticals
LN	Lupus nephritis
L-QoL	The systemic lupus erythematosus quality of life questionnaire
MAC	Membrane attack complex
MCS	Mental health component summary score
<b>MMF</b>	Mycophenolate mofetil
MOCA	Montreal cognitive assessment
MRA	Magnetic resonance angiography
MRI	Magnetic resonance imaging
MTX	Methotrexate
NIH	National institutes of health
NPSLE	Neuropsychiatric SLE
NRH	Nodular regenerative hyperplasia
NSAIDs	Non steroidal anti inflammatory drugs
PCS	Physical health component summary score
<b>PE</b>	Pulmonary embolism
QOL	Quality of life
RBCs	Red blood cells
SELENA	Safety of estrogen in lupus erythematosus national assessment

## LIST OF ABBREVIATIONS (CONT.)

Abbrev.	Full Term
SF20	. Short form 20
SF36	. Short form 36
<b>SL</b>	. Satisfaction with life
<b>SLAM</b>	. Systemic lupus activity measure
SLE	. Systemic lupus erythematosus
SLEDAI	Systemic lupus erythematosus disease activity index
SLE-QoL	. Systemic lupus erythematosus-specific QoL
SLICC	. Systemic lupus international collaboratory clinics
SLICC/ACR	Systemic lupus international collaborating clinics/American college of rheumatology
SMILEY	Simple measure of impact of lupus erythematosus in youngsters
<b>SPF</b>	. Skin protection factor
TLR-9	. Toll like receptor
<b>TNF</b>	.Tumor necrosis factor
$\tau v \dots \dots$	. Teva Pharmaceuticals
UVR	. Ultraviolet radiation
WBCs	. White blood cells
<b>WD</b>	. Work disability
Who QoL-BRE	<b>F</b> World health organization-Qol scale

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#### Introduction

Systemic lupus erythematosus (SLE) is a prototype of autoimmune diseases affecting predominantly women. It is characterized by dysregulation of self-reactive B cells leading to autoantibody production, immune complex deposition and complement activation with tissue damage (*Rojas-Villarraga et al.*, 2010).

Systemic lupus erythematosus most often harms the heart, joints, skin, lungs, blood vessels, liver, kidneys, and nervous system. The course of the disease is unpredictable with period of illness (called flares) alternating with remission (*Rahman and Isenberg*, 2010).

With improvement in mortality in SLE, the functional status of these patients, assessed using health – related quality of life (HRQoL) instruments, is increasingly being recognized as an important outcome measure in clinical research. Domains of HR QoL of particular importance to systemic lupus erythematosus patients include fatigue, ability to work, good, health, independence, social and family life, learned helplessness, (reflecting the unpredictability of lupus), pain and the home environment. The SF-36 currently appears to be the best available generic instrument (*Strand et al.*, 2006).

A study done by *Kulczycka et al.* (2010) found that systemic lupus erythematosus patient's quality of life (QoL) as

assessed by short form 36 and satisfaction with life (SL) was rather low. Those with photosensitivity as well as neurological symptoms presented lower QoL in particular domains, while those with renal manifestations of systemic lupus erythematosus assessed their QoL as higher. Similar observations were made for SL only in relation to neurological symptoms. Moreover their findings showed that although SL is part of HQoL, both these parameters should be distinguished in order to fully assess the state of the patient.

It has been shown that SLE patients have poorer functional status than the general population, and that specific manifestations of systemic lupus erythematosus (disease activity, previous renal involvement and fibromyalgia) may influence HRQoL (*Grootscholten et al.*, 2003A).

HRQoL in systemic lupus erythematosus patients has been improved by (1) psycho-educational interventions including telephone counseling, a self-help course, group psychotherapy; (2) therapies (*Thumboo and Strand*, 2007).