

**The concentration of Leukemia  
inhibitory factor in uterine flushing fluid  
in females with unexplained infertility**

Thesis submitted for partial fulfillment  
of Master degree in Obstetrics and Gynecology

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## *List of Abbreviations*

AMH	Anti-müllerian hormone
aPL	antiphospholipid antibodies
ART	Assisted reproductive technology
ASRM	American Society for Reproductive Medicine
AUC	Area under the curve
BBT	Basal body temperature
BMI	Body Mass Index
BMP-2	Bone morphogenetic factor-2
cAMP	Cyclic adenosine monophosphate
CAMs	Cell adhesion molecules
CATs	Chlamydia Antibody Titres
CC	Clomiphence citrate
COH	Controlled ovarian hyperstimulation
COX	Cyclo-oxygenase
CSF-I	Colony-stimulating factor-I
DAPCs	Human decidual antigen presenting cells
E2	Estradiol
ECM	Extracellular matrix
EGF	Epidermal growth factor
EGFR	Epidermal growth factor receptor
ELISA	Enzyme Linked Immunosorbant Assay
EPF	Early pregnancy factor
ER	Estrogen receptor
ERK	Extracellular signal-regulated kinase
ET	Embryo transfer
ETBF	Endometrial tissue blood flow
FSH	Follicle stimulated hormone
GIFT	Gamete intrafallopian transfer
GM-CSF	Granulocyte macrophage colonystimulatingfactor

GnRH	Gonadotropin Releasing Hormone
gp-130	Glycoprotein-130
HB-EGF	Heparin binding- Epidermal growth factor
HCC	Human choriocarcinoma
hCG	Human chorionic gonadotropin
HLA	Human leukocyte antigens
HS	Highly significant
HSG	Hysterosalpingography
ICM	Inner cell mass
ICSI	Intra-cytoplasmic sperm injection
IFN	Interferon
IFN- $\gamma$	Interferon- $\gamma$
IGF	Insulin-like growth factor
IGFBP-1	Insulin-like growth factor binding protein-1
IL1	Interleukin-1
IL-10	Interleukin-10
IL-2	Interleukin-2
IL-5	Interleukin-5
IL-6	Interleukin-6
IRG1	Immune response gene 1
IUI	Intrauterine insemination
IVF	In-vitro fertilization
IVF/ET	In-vitro fertilization/Embryo transfer
JAKs	Janus kinases
Kb	Kilobase
kDa	KiloDaltons
KO	Knockout
LE	Luminal epithelium
LH	Lutenizing hormone
LIF	leukemia inhibitory factor
LIF-R	Leukemia inhibitory factor receptor
LIF-Rb	LIF receptor-b

LPD	luteal phase defect
LUF	Luteinized unruptured follicle syndrome
M	Mole
MHC	Myeloid human cell line
MIF	Macrophage migration inhibitory factor
MIS	Müllerian-inhibiting substance
MMPs	Matrix metalloproteinases
mRNA	Messenger ribonucleic acid
MUC	Mucins
MW	Molecular weight
NDL	Normal distribution line
NK cells	Natural Killer cells
OPN	Osteopontin
PCOS	Polycystic ovary syndrome
PDGF	Platelet derived growth factor
PGE2	Prostaglandin E2
PI3K	Phosphatidylinositol- 3-kinase
PIAS	Protein inhibitor of activated
PID	Pelvic inflammatory disease
POF	premature ovarian failure
PPARd	Peroxisome proliferators activated receptor d
PR	Progesterone receptor
PR A	Progesterone type A receptor
PR B	Progesterone type B receptor
PTEN	Phosphatase and tensin homologue
RGD	Arginine-glycine-aspartic acid
RIF	Recurrent implantation failure
RNA	Ribonucleic acid
ROC	Receiving operating characteristic curve
STAT	Signal transducer and activator of transcription
T reg	T-regulatory
TGF	Transforming growth factor

TGF- $\alpha$	Transforming growth factor alpha
TGF- $\beta$	Transforming growth factor- $\beta$
Th	T-helper
Th1	T-helper Type1
Th2	T-helper Type2
TIMPs	Tissue inhibitors of metalloproteinases
TNF- $\alpha$	Tumor necrosis factor- $\alpha$
TNF- $\beta$	Tumor necrosis factor- $\beta$
TSH	Thyroid stimulating hormone
TUN	Trophouteronectin
uNK	uterine specific natural killer cells
VEGF	Vascular endothelial growth factor
WHO	World Health Organization
WOI	Window of implantation
ZIFT	Zygote intrafallopian transfer
$\kappa$ B	Transcription factor nuclear factor

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