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Presepsin as a novel diagnostic and prognostic sepsis biomarker

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بسم الله الرحمن الرحيم
﴿ قالوا سبحانك لا علم لنا الا ما علمتنا
إنك انت العليم الحكيم ﴾
صدق الله العظيم
الآيه(32) سوره البقره

DEDICATION

This thesis is proudly dedicated to my beloved family

(my parents, my husband and my son Suhail)

Thanks for your endless love, prayers, sacrifices and support

Heba Nabil Mahmoud Bendary

This thesis has not been submitted to this or any other university

Heba Nabil Mahmoud Bendary

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LIST of ABBREVIATIONS

Abbreviation		Full name
ACCP/SCCM	:	American college of chest physicians/society of critical care medicine
AUC	:	area under the curve
aPPT	:	activated partial thromboplastin time
ARDS	:	acute respiratory distress syndrome
APC	:	activated protein C
APACHE II	:	acute physiology and chronic health evaluatio
ADM	:	adrenomedullin
ALP	:	alkaline phosphatase
ANOVA	:	one-way analysis of variance
BP	:	blood pressure
CRP	:	C-reactive protein
CD14	:	cluster of differentiation 14
C5a	:	complement components 5a
C3a	:	complement components 3a obstetrics
C5aR	:	c5a receptor protein
CLRs	:	c-type lectin receptors
CXC	:	chemotaxis
C1q	:	complement component 1q
CARS	:	compensatory anti-inflammatory response syndrome
DAMPs	:	danger-associated molecular patterns
DIC	:	disseminated intravascular coagulation
DAMPs	:	danger molecules that perpetuate
ELAM-1	:	endothelial leukocyte adhesion molecule 1
EPIC	:	European prevalence of infection in intensive
E. coli	:	Eschershia coli
ELISA	:	enzyme-linked immunosorbent assay

EDTA	:	ethylenediaminetetraacetic acid
G-CSF	:	granulocyte colony-stimulating factor
GM-CSF	:	granulocyte macrophage colony-stimulating factor
HMGB1	:	high-mobility-group protein B1
HRP	:	horseradish peroxidase
HIV	:	immunodeficiency virus
HAART	:	highly active antiretroviral therapy
ICAM-1	:	intercellular adhesion molecule 1
IL-6	:	interleukin-6
ICU	:	intensive care unit
IQR	:	interquartile range
IL-1ra	:	IL-1 receptor antagonist
LTA	:	lipoteichoic acid
LPSs	:	lipopolysaccharides
LBPs	:	LPS-binding proteins
EPCR	:	endothelial cell protein C receptor
MIF	:	macrophage migration inhibitory factor
mHLA-DR	:	monocytic human leukocyte antigen-DR
MRSA	:	low-grade serous carcinoma
MAb	:	monoclonal antibody
MASP-2	:	mannose-binding protein-associated serine protein-2
NOD2	:	domain-containing protein 2
NLRs	:	nucleotide-binding oligomerization domain–li receptors
NF-κB	:	nuclear factor kappa B
PAMPs	:	pathogen-associated molecular patterns
NPV	:	negative predictive value
PRRs	:	pattern recognition receptors
PT	:	prothrombin time
PAI-1	:	plasminogen activator inhibitor-1
PPV	:	positive predictive value

PAR1	:	protease activated receptor 1
PMN	:	polymorphonuclear
PCT	:	procalcitonin
Pro	:	prothrombin
PTX3	:	pentraxin 3
RLRs	:	retinoic acid inducible gene 1–like receptors
ROC	:	receiver operating characteristic
SIRS	:	systemic inflammatory response syndrome
sCD14-ST	:	soluble cluster of differentiation 14 subtype
sTNF	:	soluble tumor necrosis factor
suPAR	:	soluble urokinase type plasminogen activator receptor
sTREM-1	:	soluble triggering receptor expressed on myeloid cells 1
SD	:	standard deviation
S1P1	:	sphingosine-1 phosphate receptor 1
SAP	:	serum amyloid P component
SAPS II	:	simplified acute physiology score II
TLR4	:	toll-like receptor 4
TNF	:	tumor necrosis factor
T	:	thrombin
TM	:	thrombomodulin
TF	:	tissue factor
TREM-1	:	triggering receptor expressed on myeloid cells 1
UK	:	United Kingdom
US	:	United States
uPA	:	urokinase-type plasminogen activator

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