Value of Presepsin in the Diagnosis of Neonatal Sepsis in Genetic Disorders

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بِسْمِ ٱللَّهِ ٱلرَّحْمَٰنِ ٱلرَّحِيمِ

قُلْ إِنَّ صَلَاتِي وَنُسُكِي وَمَحْيَايَ وَمَمَاتِي لِلَّهِ رَبِّ ٱلْعَالَمِينَ ﴿١٦٢﴾

لَا شَرِيكَ لَهُۥ ۖ وَبِذَٰلِكَ أُمِرْتُ وَأَنَا۠ أَوَّلُ ٱلْمُسْلِمِينَ ﴿١٦٣﴾

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Dedication

I would like to dedicate this work

to my mother, my husband and my son.

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LIST OF ABBREVIATIONS

Abbrev	*Full term*
APPs	Antimicrobial proteins and peptides
AUC	Area under the curve
C3	Complement 3
CBC	Complete blood picture
CD14	Cluster of differentiation 14
CHD	Congenital heart disease
CoNS	Coagulase-negative Staphylococci
CPAP	Continuous positive air pressure
CRP	C-reactive protein
CNS	Central nervous system
CSF	Cerebrospinal fluid
CSFs	Colony stimulating factors
CVS	Cardiovascular system
DIC	Disseminated intravascular coagulopathy
DNA	Deoxyribonucleic acid
DR	Delivery room
E. coli	Escherichia coli
EDTA	Ethylene diamine tetra-acetic acid
ELBW	Extremely low birth weight
ELISA	Enzyme-linked immunosorbent assay
EOS	Early onset sepsis
ETT	Endotracheal tube
F	Multi-way ANOVA test
FDA	Food and Drug Administration
FITC	Fluorescine isothiocyanate
FN	False negative

Abbrev	*Full term*
FP	False positive
G-CSF	Granulocyte colony stimulating factor
GA	Gestational age
GBS	Group B streptococci
GI	Gastrointestinal tract
GPI	Glycosylphosphatidylinositol
Hb	Hemoglobin
HIV	Human immunodeficiency virus
HMGB1	High-mobility group box 1
HS	Highly significant
IT-ratio	Immature to total neutrophils ratio
ICAM-1	Intercellular Adhesion Molecule 1
ICU	Intensive care unit
IEM	Inborn errors of metabolism
IFN-γ	Interferon-gamma
Ig	Immunoglobulin
IGs	Immature granulocytes
IL	Interleukin
IQR	Interquartile range
LBW	low birth weight
LOS	Late onset sepsis
LPS	Lipopolysaccharide
LBP	LPS binding protein
mCD14	Membrane-bound CD14
MFI	Mean fluorescent intensity
miRNAs	MicroRNAs
MoAbs	Monoclonal antibodies

Abbrev	*Full term*
MODS	Multiple organ dysfunction syndrome
MPV	Mean platelet volume
MRSA	Methicillin -resistant Staph. aureus
NF-κβ	Nuclear transcription factor κβ
NICU	Neonatal intensive care unit
NIH	National Institutes of Health
NPV	Negative predictive value
NS	Neonatal sepsis
NO	Nitrous oxide
PAF	Platelet activating factor
PAI-1	Plasminogen activator inhibitor-1
PC	Personal computer
PCR	Polymerase chain reaction
PCT	Procalcitonin
PDA	Patent ductus arteriosus
PDW	Platelet distribution width
PPHN	Persistent Pulmonary Hypertension of the Newborn
PPV	Positive predictive value
PROM	Premature rupture of membrane
ProADM	Proadrenomedullin
RAGE	Receptor for Advanced Glycation End-products
RBCs	Red blood cells
RDS	Respiratory distress syndrome
RNA	Ribonucleic acid
ROC	Receiver operating characteristic
ROM	Rupture of membrane
RR	Relative risk

Abbrev	*Full term*
RT-PCR	Reverse transcription polymerase chain reaction
rpm	Radius per minute
rs	Correlation coefficient
S	Significant
SAA	Serum amyloid A
sCD14	Soluble form of CD14
sCD14-ST	Soluble CD14 subtype
SIRS	Systemic inflammatory response syndrome
SPEA	Streptococcal pyrogenic exotoxin A
spp.	Species
SPSS	Statistical Package for Special Sciences
SSC	Surviving Sepsis Campaign
sTREM-1	Soluble Triggering Receptor Expressed on Myeloid cells-1
suPAR	Soluble urokinase-type plasminogen receptor
t	Student's t-test
TAT	Turnaround time
Th	T helper
TLC	Total leukocyte count
TLR	Toll-like receptor
TN	True negative
TNF-α	Tumor necrosis factor alpha
TP	True positive
tPA	Tissue plasminogen activator
TPN	Total parenteral nutrition
TSST-1	Toxic shock syndrome toxin 1
UTI	Urinary tract infection

Abbrev	*Full term*
VCAM-1	Vascular cell adhesion molecule 1
VLBW	Very low birth weight
WBCs	White blood cells
WHO	World Health Organization
X^2	Pearson chi-square test
Z	Mann Whitney test