## Role of Matrix Metalloproteinase 9 and Tissue Inhibitor of Metalloproteinase I in Perinatal Asphyxia

#### **Thesis**

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# دور مصفوفة ميتالوبروتيناز ٩ والمثبط الخلوي ميتالوبروتيناز ١ في أسفكسيا ما حول الولادة

رسالة مقدمة للحصول على درجة دكتوراه الفلسفة في دراسات الطفولة قسم الدراسات الطبية معهد الدراسات العليا للطفولة (صحة وتغذية الطفل)

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### List of Abbreviations

AAP	:	American academy of pediatrics
ABG	:	Arterial blood gases
ACOG	:	American college of Obstetrics and Gynecologists
ADH	:	Antidiuretic hormone
aEEG	:	Amplitude-integrated electroencephalography.
AMP/QA	:	amino hydroxy methyl isoxazolepropionic acid
ATP	:	adenosine triphosphate
BBB	:	blood brain barrier
BGT	:	basal ganglia and thalamus
BPD	:	Bronchopulmonary dysplasia
CBF	:	Cerebral blood flow
CBF	:	Cerebral blood flow
CK	:	Creatine Kinase
CLD	:	Chronic lung disease
CNS	:	Central nervous system
CSF	:	Cerebrospinal fluid
ECM	:	Extracellular matrix
EEG	:	Electroencephalography
EPO	:	Erythropoietin
FGF	:	Fibroblast growth factor
FGFR1	:	Fibroblast growth factor receptor 1
FT	:	Fullterm
GMI	:	Monosialogangliosides
GPI	:	Glycosylphosphatidylinositol
H-I	:	Hypoxia-ischemia
HIE	:	Hypoxic ischemic encephalopathy
HIF	:	Hypoxia-inducing factor
HIV	:	Human immunodeficiency disease
HMD	:	Hyaline membrane disease
HT	:	Hemorrhagic transformation
ICH	:	Intracranial hemorrhage
IL1b	:	Interleukin 1 b
IPPV	:	Intermittent positive pressure ventilation

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IUGR	:	Intrauterine growth retardation
IVH	:	Intraventricular hemorrhage
LDH	:	Lactate dehydrogenase
MCAO	:	Middle cerebral artery ocllusion
MCP	:	Membrane Cofactor Protein
MCP-3	:	Membrane Cofactor Protein-3
MMPs	:	Matrix Metalloproteinase's
MT-MMPs	:	Membrane-Tight Matrix Metalloproteinase
NAA	:	N-acetylaspartate
NEC	:	Necrotizing enterocolitis
NMDA	:	N-methyle-D-aspartate receptors
NOS	:	Nitric oxide synthase
PET	:	Positron Emission Tomography
PLIC	:	Posterior limb of the internal capsule
PPROM	:	Premature rupture of membrane
PT	:	Preterm
PTD	:	Preterm delivery
PV/TVH	:	Periventricular-intraventricular hemorrhage
PVL	:	Periventricular leukomalacia
RI	:	Resistive index
ROP	:	Retinopathy of prematurity
S&S	:	Sarnat and sarnat staging
SB-3CT	:	The gelatinase-selective compound
SDF-la	:	Sodium dodecyle sulfate-one alfa
SEP	:	Somatosensory evoked potential
SIADH	:	Syndrome of inaproprite antidiuretic hormone
SPECT	:	Single photon emission computed tomography
SPTL	:	Spontaneous preterm labor
SVZ	:	Subventricular zone
Tc99	:	Technetium
TIMPs	:	Tissue inhibitor of metalloproteinase
TNF-a	:	Tumour necrosis factor alfa
WM	:	White matter
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