# Pulmonary Antioxidant concentration and Oxidative damage in ventilated preterm with Respiratory distress syndrome

#### Thesis

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## Dedication

To

Family for their warn affection, patience, encouragement, and for always being there when I needed them.

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**MAP** : Mean airway pressure

**NCPAP** : Nasal Continous positive airway pressure

**NEC**: Necrotizing enterocolitis

**NICU**: Neonatal intensive care unite

**NIPPV**: Nasal intermittent positive pressure ventilation

No : Nitric oxide

Ns : Neonatal sepsis

O<sub>2</sub> : Oxygen

**OI** : Oxygenation index

**PaCo2** : Partial pressure of carbon dioxide

Pao<sub>2</sub>: Partial pressure of oxygen

**Pb** : Barometric pressure

**PPHN**: Persistent pulmonary hypertension

PCA : Post conceptual age

**PDA** : Patent ducts arteriosus

**PEEP** : Positive end expiratory pressure

**PIP** : Peak inspiratory pressure

**PMA** : Postmenstrual age

**PPV** : Positive pressure ventilation

**PSV** : Pressure support ventilation

**PTV**: Patient triggered ventilation

**PVL** : Periventricular leukomalacia

**RDS** : Respiratory distress syndrome

**ROM** : Rupture of membranes

**ROP** : Retinopathy of prematurity

**SGA** : Small for gestational age

**SIMV** : Synchronized intermittent mandatory ventilation

**SPS**: Surfactant protein

**VAP** : Ventilator associated pneumonia

**VI** : Ventilator index

V/P

: Ventilation perfusion mismatch

mismatch

Wk : Week

**SOD** : Superoxide dismutase

**OH** : Hydroxyl radical

**ROS** : Reactive oxygen species

**RNS** : Reactive nitrogen species

O<sup>2</sup> : Superoxide

**RO**<sub>2</sub> : Peroxyle

 $H_2O_2$ : hydrogen peroxide

**HRO**<sup>2</sup> : Hydroperoxyl

**RONOO** : Alkyl Peroxynitrate

**GPX** : Glutathione peroxidse

**XOR** : Xanthine oxidoreductase

**MAD** : Malondialdehyde

**GSH** : Glutathione

**CS**: Cesarean section

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