LIST OF ABBREVIATIONS

DCIP 2,6-dichloroindophenol
AKI Acute kidney injury
Paw Airway pressure
ALT Alanine transaminase
ADH Antidiuretic hormone
ASL Arterial spin labelling
AST Aspartate transaminase
BOLD Blood oxygen level dependent
BW Body weight
BSA Bovine serum albumin
BD Brain death
FCCP Carbonyl cyanide-4-(trifluoromethoxy) phenylhydrazone
CAT Catalase
CPP Cerebral perfusion pressure
Cxc1 Chemokine ligand 1
Ccl2 Chemokine ligand 2
CK-MB Creatine kinase (myocardium)
CrC Creatinine clearance
Cinc1 Cytokine induced neutrophil chemoattractant 1
DBD Deceased brain-dead
DCD Deceased circulatory death
DGF Delayed graft function
DPBS Dulbecco’s phosphate-buffered saline
TE Echo time
ETC Electron transport chain
ETCO₂ End-tidal CO₂
EDTA Ethylenediaminetetraacetic acid
ECD Expanded criteria donors
FAO Fatty acid β oxidation
FOV Field of view
FiO₂ Fraction of inspired oxygen
FeNa Fractional sodium excretion
GPx Glutathione peroxidase
GR Glutathione reductase
GAPDH Glyceraldehyde 3-phosphate dehydrogenase
HO-1 Heme oxygenase 1
H₂O₂ Hydrogen Peroxide
HAES Hydroxethyl starch
IL-6 Interleukin 6
IL-10 Interleukin-10
IL-6 Interleukin-6
ICP Intracranial pressure
I-R Ischemia-reperfusion
IPK Isolated perfused kidney
LDH Lactate dehydrogenase
LDHA Lactate dehydrogenase A
LD Living donor
MRI Magnetic resonance imaging
MDA Malondialdehyde
MnTMPyP Manganese(III) tetrakis(1-methyl-4-pyridyl)porphyrin
MAP Mean arterial pressure
MCP-1 Monocyte chemotactic protein 1
NAG N-acetyl-β-D-glucosaminidase
NADPH Nicotinamide adenine dinucleotide phosphate
NA Noradrenaline
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Term</th>
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<tbody>
<tr>
<td>GSSG</td>
<td>Oxidized glutathione</td>
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<tr>
<td>SaO₂</td>
<td>Oxygen saturation</td>
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<tr>
<td>PAS</td>
<td>Periodic-Acid Schiff</td>
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<td>PMSF</td>
<td>Phenylmethylsulfonyl fluoride</td>
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<tr>
<td>PBS</td>
<td>Phosphate buffered saline</td>
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<tr>
<td>Pik-1</td>
<td>Phosphofructokinase-1</td>
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<tr>
<td>PMN</td>
<td>Polymorphonuclear</td>
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<tr>
<td>PEEP</td>
<td>Positive end expiratory pressure</td>
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<tr>
<td>PNF</td>
<td>Primary non-function</td>
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<tr>
<td>P-P</td>
<td>Probability-probability</td>
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<tr>
<td>Pc</td>
<td>Pyruvate carboxylase</td>
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<td>Pk</td>
<td>Pyruvate kinase</td>
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<td>ROS</td>
<td>Reactive oxygen species</td>
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<tr>
<td>GSH</td>
<td>Reduced glutathione</td>
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<tr>
<td>TR</td>
<td>Repetition time</td>
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<tr>
<td>RCR</td>
<td>Respiratory control ratio</td>
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<tr>
<td>Crs</td>
<td>Serum creatinine</td>
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<tr>
<td>Crs</td>
<td>Serum creatinine</td>
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<tr>
<td>SD</td>
<td>Standard deviation</td>
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<td>SOD</td>
<td>Superoxide dismutase</td>
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<td>SVR</td>
<td>Systemic vascular resistance</td>
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<tr>
<td>TLDA</td>
<td>TaqMan low density array</td>
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<tr>
<td>TBA</td>
<td>Thiobarbituric acid</td>
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<tr>
<td>TGF-β</td>
<td>Transforming growth factor-beta</td>
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<tr>
<td>TCA</td>
<td>Tricarboxylic acid</td>
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<tr>
<td>TNF-α</td>
<td>Tumor necrosis factor alpha</td>
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<tr>
<td>TNF-α</td>
<td>Tumor necrosis factor α</td>
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<tr>
<td>UCr</td>
<td>Urinary creatinine</td>
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<tr>
<td>Vcam1</td>
<td>Vascular adhesion molecule 1</td>
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<tr>
<td>H₂O</td>
<td>Water</td>
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<tr>
<td>W/D</td>
<td>Wet-dry</td>
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</table>
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BIOGRAPHY

Dane was born on February 14th, 1988, in Durban, South Africa. After having been raised in South Africa, Germany, and Ivory Coast, Dane graduated from high school at the Etty Hillesum Lyceum in 2006 in Deventer, the Netherlands. He obtained a pre-medical degree from University College Utrecht after which he studied medical statistics for a year at the Radboud University in Nijmegen. He then started medical school in 2010 at the Rijksuniversiteit Groningen. During his medical studies, participation in the summer school "Transplantation" led to a research internship at the surgical laboratory under the supervision of professors H.G.D. Leuvenink and H. van Goor. He decided to prolong his research career and alternated this with his medical studies. Two years of full time research eventually led to this thesis. For his medical studies, Dane was a medical intern at the University Medical Centre Groningen as well as "Deventer Ziekenhuis" in his hometown. During this period, Dane served as the chairman of the commission "de Masterraad" which represents the student body of the medical school of the Rijksuniversiteit Groningen. He completed his medical degree with a final internship at the neurosurgical department at the University Medical Center Utrecht which is where he now works as a doctor.