

**Role of micro RNA125a and Pulsatile
Hemodynamics Parameters in Assessment
of Pulmonary Arterial Hypertension in
Congenital Heart Disease**

Thesis

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List of Abbreviations

Abb.	Full term
<i>2D</i>	<i>Two dimensional</i>
<i>6MWD</i>	<i>6-Minute walk distance</i>
<i>6MWT</i>	<i>6- Minute walk test</i>
<i>A`</i>	<i>Peak late diastolic velocity</i>
<i>ACCF</i>	<i>American college of cardiology foundation</i>
<i>Ago2</i>	<i>Argonaute protein</i>
<i>AHA</i>	<i>American Heart Association</i>
<i>APHD-CHD</i>	<i>Pulmonary arterial hypertension associated with congenital heart disease</i>
<i>APVR</i>	<i>Anomalous pulmonary venous return</i>
<i>ASD</i>	<i>Atrial septal defect</i>
<i>AT</i>	<i>Acceleration time</i>
<i>AT/ET</i>	<i>Accleration time / ejection time ratio</i>
<i>ATS</i>	<i>Advanced therapies</i>
<i>AVSD</i>	<i>Complete Atriovertricular septal defect</i>
<i>AVT</i>	<i>acute vasodilator testing</i>
<i>BMP4</i>	<i>Bone morphogenic protein 4</i>
<i>BMPR2</i>	<i>Bone morphogenic protein receptor type 2</i>
<i>BNP</i>	<i>B-type natriuretic peptide</i>
<i>BSA</i>	<i>Body surface area</i>
<i>CCB</i>	<i>Calcium channel blocker</i>
<i>CDK</i>	<i>Cyclin-dependent kinase</i>
<i>CHD</i>	<i>Congenital heart disease</i>
<i>CHF</i>	<i>Congestive heart failure</i>
<i>CI</i>	<i>Cardiac index</i>
<i>CP</i>	<i>Pulmonary artery compliance</i>
<i>CPB</i>	<i>Cardiopulmonary bypass</i>
<i>CT</i>	<i>Computed tomography</i>
<i>CTD</i>	<i>Connective tissue disease</i>

List of Abbreviations (cont...)

Abb.	Full term
<i>CTEPH</i>	<i>Chronic thromboembolic pulmonary hypertension</i>
<i>DPAP</i>	<i>Diastolic pulmonary artery pressure</i>
<i>DTPG</i>	
<i>E'</i>	<i>Peak early diastolic velocity</i>
<i>ECG</i>	<i>Electrocardiogram</i>
<i>ERA</i>	<i>Endothelin receptor agonist</i>
<i>ES</i>	<i>Eisenmenger syndrome</i>
<i>ET</i>	<i>Ejection time</i>
<i>ET-1</i>	<i>Endothelin 1</i>
<i>FGF2</i>	<i>Basic fibroblast growth factor</i>
<i>FGFR1</i>	<i>Fibroblast growth factor receptor 1</i>
<i>HF</i>	<i>Heart failure</i>
<i>HPAH</i>	<i>Hereditary pulmonary arterial hypertension</i>
<i>HR</i>	<i>Heart rate</i>
<i>HUVECs</i>	<i>Human umbilical vein endothelial cells</i>
<i>IGF-1</i>	<i>Insulin-like growth factor;</i>
<i>IL-6</i>	<i>Interleukin 6</i>
<i>IPAH</i>	<i>Idiopathic pulmonary arterial hypertension</i>
<i>IV</i>	<i>Intravenous</i>
<i>IVC</i>	<i>Inferior vena cava</i>
<i>IVCT</i>	<i>Isovolumic contraction time</i>
<i>IVRT</i>	<i>Isovolumic relaxation time</i>
<i>IVS</i>	<i>interventricular septum</i>
<i>KLF</i>	<i>Kruppel-like factor</i>
<i>LV</i>	<i>left ventricle</i>
<i>MCT</i>	<i>Monocrotaline</i>
<i>miRNA</i>	<i>microRNA</i>
<i>MPAP</i>	<i>Mean pulmonary artery pressure</i>
<i>MPI</i>	<i>Myocardial performance index</i>

List of Abbreviations (cont...)

Abb.	Full term
<i>MRI</i>	<i>Magnetic resonance imaging</i>
<i>mRNA</i>	<i>Messenger RNA</i>
<i>MVO2</i>	<i>Mixed venous saturation</i>
<i>NFAT</i>	<i>Nuclear factor of activated T-cells</i>
<i>nFAT-1</i>	<i>Nuclear factor of activated T-cells 1</i>
<i>NO</i>	<i>Nitric oxide</i>
<i>PA</i>	<i>Pulmonary artery</i>
<i>PAC</i>	<i>Pulmonary artery compliance</i>
<i>PACO2</i>	<i>Systemic arterial carbon dioxide partial pressure</i>
<i>PAEC</i>	<i>Pulmonary artery endothelial cell</i>
<i>PAH</i>	<i>Pulmonary arterial hypertension</i>
<i>PAP</i>	<i>Pulmonary artery pressure</i>
<i>PASMC</i>	<i>Pulmonary artery smooth muscle cell</i>
<i>PAWP</i>	<i>Pulmonary artery wedge pressure</i>
<i>PBF</i>	<i>Pulmonary blood flow</i>
<i>PCR</i>	<i>Polymerase chain reaction</i>
<i>PCWP</i>	<i>Pulmonary capillary wedge pressure</i>
<i>PDA</i>	<i>Patent ducts arteriosus</i>
<i>PDESI</i>	<i>Phosphodiesterase-5 inhibitor</i>
<i>PG</i>	<i>Prostaglandin derivative</i>
<i>PH</i>	<i>Pulmonary hypertension</i>
<i>PHVD</i>	<i>Pulmonary hypertensive vascular disease</i>
<i>PPHN</i>	<i>Persistent pulmonary hypertension of newborn</i>
<i>PR</i>	<i>Pulmonary regurgitation</i>
<i>Pre-miRNA</i>	<i>Precursor miRNA</i>
<i>Pri-miRNA</i>	<i>Primary miRNA</i>
<i>PSV</i>	<i>Pulmonary stroke volume</i>
<i>PVOD</i>	<i>Pulmonary vascular obstructive disorder</i>
<i>PVR</i>	<i>Pulmonary vascular resistance</i>

List of Abbreviations (cont...)

Abb.	Full term
<i>QP</i>	<i>Pulmonary blood flow</i>
<i>QPCR</i>	<i>Quantitative real-time PCR</i>
<i>QS</i>	<i>Systemic blood flow</i>
<i>RA</i>	<i>Right atrium</i>
<i>RHC</i>	<i>Right heart catheterization</i>
<i>RISC</i>	<i>RNA Induced silencing complex</i>
<i>RP</i>	<i>Pulmonary artery resistance</i>
<i>RV</i>	<i>Right ventricle</i>
<i>RVH</i>	<i>Right ventricular hypertrophy</i>
<i>RVOT</i>	<i>Right ventricle outflow tract</i>
<i>RVSP</i>	<i>Right ventricle systolic pressure</i>
<i>S/D</i>	<i>Systolic to diastolic time</i>
<i>S/P</i>	<i>Post status</i>
<i>S'</i>	<i>Peak systolic velocity</i>
<i>SAO2</i>	<i>Systemic arterial oxygen saturation</i>
<i>SAP</i>	<i>Systemic arterial pressure</i>
<i>SHP2: STAT3</i>	<i>Signal transducer and activator of transcription3</i>
<i>SIVC O2</i>	<i>Oxygen saturation in IVC</i>
<i>SPAP</i>	<i>Systolic pulmonary artery pressure</i>
<i>SPVO2</i>	<i>Oxygen saturation in pulmonary vein</i>
<i>SQ</i>	<i>Subcutaneous</i>
<i>SRC, v-Src</i>	<i>Sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog</i>
<i>SSVCO2</i>	<i>Oxygen saturation in SVC</i>
<i>STAT-3</i>	<i>Signal transducer and activator of transcription-3</i>
<i>SVC</i>	<i>Superior vena cava</i>
<i>SVI</i>	<i>Stroke volume index</i>
<i>SVR</i>	<i>Systemic vascular resistance</i>

List of Abbreviations (cont...)

Abb.	Full term
<i>TAPSE</i>	<i>Tricuspid annular plane systolic excursion</i>
<i>TCSO2</i>	<i>Transcutaneous oxygen saturation</i>
<i>TDI</i>	<i>Tissue Doppler imaging</i>
<i>TGFβ</i>	<i>Transforming growth factor β</i>
<i>TOPP</i>	<i>Registry Tracking outcomes and practice in pediatric pulmonary hypertension</i>
<i>TPGS</i>	<i>Transpulmonary pressure gradients</i>
<i>TR</i>	<i>Tricuspid regurgitation</i>
<i>VO2 max</i>	<i>Maximum Oxygen consumption</i>
<i>VSD</i>	<i>Ventricular septal defect</i>
<i>VSMC</i>	<i>Vascular smooth muscle cells</i>
<i>VTI</i>	<i>Velocity time integral</i>
<i>WHO</i>	<i>World Health Organization</i>
<i>WU</i>	<i>Wood units</i>

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