

## Supplemental material

S1: Category and family classification of cardiac catheterization procedures in the COCCINELLE cohort

Category of procedures	Family of procedures	Names of the procedures
Diagnostic procedures	Right heart angiography	- Catheterization right with contrast
	Diagnostic procedures without angiography	- Catheterization right without contrast - Catheterization left without contrast - Catheterization left and right without contrast - Biopsy endo-myocardial  Pulmonary arterial hypertension - Pulmonary arterial hypertension with normal heart - Pulmonary arterial hypertension shunt (Eisenmenger)
	Left heart angiography	- Catheterization left with contrast
Therapeutic procedures	Pulmonary valvuloplasty	- Pulmonary valve dilatation - Pulmonary atresia intact ventricular septum, radiofrequency, perforation - Perforation pulmonary valve
	Aortic valvuloplasty	- Aortic valve dilatation
	Rashkind	- Atrial septostomy
	Aortic dilatation / stenting	- Balloon dilatation of coarctation of the aorta - Stenting of aortic coarctation
	Pulmonary artery dilatation / stenting	- Balloon dilatation of pulmonary artery: unique / multiple - Balloon dilatation of pulmonary artery - Balloon dilatation of right ventricle - pulmonary artery conduit - Balloon dilatation of homograft - Balloon dilatation of pulmonary artery banding - Stenting of pulmonary artery branch: unique stent / multiple stents - Stenting of pulmonary artery trunk: unique stent / multiple stents - Stenting of right ventricle - pulmonary artery conduit: unique stent / multiple stents - Percutaneous pulmonary valve implantation - Patent ductus arteriosus dilatation

	Various angiography	<ul style="list-style-type: none"> <li>- Balloon dilatation of superior vena cava</li> <li>- Superior vena cava stenting</li> <li>- Balloon dilatation of inferior vena cava</li> <li>- Inferior vena cava stenting</li> <li>- Balloon dilatation of pulmonary vena</li> <li>- Pulmonary vein stenting: unique / multiple</li> <li>- Balloon dilatation of coronary artery</li> <li>- Stenting Coronary: unique / multiple</li> <li>- Patent ductus arteriosus stent (non-neotal)</li> <li>- Major aortopulmonary collateral arteries: unique/ multiples</li> <li>- Balloon dilatation of Blalock</li> <li>- Stenting Blalock: unique/ multiples</li> <li>- Thrombo-aspiration, Vertical vein closure, Occlusion femoral artery, stenting iliac artery, Stenting subclavian artery.</li> <li>- Percutaneous removal of a foreign body</li> <li>- Arterio-venous fistula embolization: unique/ multiples</li> <li>- Blalock embolization</li> <li>- Fenestration closure</li> <li>- Sequestration closure: unique / multiple</li> <li>- Coronary fistula closure: unique / multiple</li> <li>- Aorto-pulmonary collaterals embolization: unique / multiple</li> </ul>
	Complex neonatal procedures	<ul style="list-style-type: none"> <li>- Hybrid procedures</li> <li>- Patent ductus arteriosus stenting</li> <li>- Atrial septal defect creation</li> <li>- Atrial septal defect stenting</li> </ul>
	Atrial septal defect closure	<ul style="list-style-type: none"> <li>- Atrial septal defect closure</li> <li>- Patent foramen ovale</li> </ul>
	Ventricular Septal Defect (VSD) closure	<ul style="list-style-type: none"> <li>- Ventricular septal defect closure</li> </ul>
	Arterial duct closure	<ul style="list-style-type: none"> <li>- Patent ductus arteriosus closure: coil / plug</li> </ul>
	Rythmology: stimulation	<ul style="list-style-type: none"> <li>- Pacemaker</li> <li>- Defibrilators</li> <li>- Pacing</li> </ul>
	Rythmology: electrophysiology	<ul style="list-style-type: none"> <li>- Electrophysiology, Flutter, Kent</li> </ul>
Other procedures	Other unclassified procedures	<ul style="list-style-type: none"> <li>- Catheterization left and right with contrast</li> <li>- Biopsy and coronarography</li> <li>- Tricuspid dilatation</li> <li>- Mitral valve dilatation</li> <li>- Aorto-pulmonary window (aorto-pulmonary septal defect)</li> </ul>