**SUPPLEMENTARY TABLE S1**

**Complication code qualifiers for severity and definitions (1)**

**Severity level 1: None**

No harm, no change in condition, may have required monitoring to assess for potential change in condition with no intervention indicated

Example:

> Air embolus or balloon rupture with no symptoms or interventions

**Severity level 2: Minor**

Transient change in condition, not life-threatening, condition returns to baseline, required monitoring, required minor intervention such as holding a medication (withholding a medication or, in other words, not administering a medication that was scheduled or planned to be given), or obtaining laboratory test(s)

Examples:

> Transfusion of blood for procedural loss of blood or management of the haemodynamics of the patient

> Transient arrhythmias that do not require intervention or terminate with manipulation of a catheter

> Vascular injury that does not result in significant extravasation or loss of distal flow, and for which no interventions are performed

> Heparin therapy for loss of pulse

> Volume to support haemodynamics

> Intensive care unit for routine post-catheterisation care and monitoring, elective mechanical ventilatory support

> Successful snaring of embolized or malpositioned coi

**Severity level 3: Moderate**

Transient change in condition may be life-threatening if not treated, condition returns to baseline, required monitoring, required intervention such as reversal agent, additional medication, transfer to intensive care unit for monitoring, or moderate transcatheter intervention to correct condition

Examples:

> Additional access to manage technical complication, uneventful removal of a device, or expansion of a stent in non-obstructive location

> Haemodynamically stable arrhythmias requiring medication administration or cardioversion

> Vascular injury that results in significant extravasation or loss of distal flow, and requires catheter-based intervention to contain

extravasation or restore flow

> Apnea, hypoxia, laryngospasm with conscious sedation requiring intubation

> Dopamine, epinephrine, calcium, in response to low blood pressure

> Atropine for heart block

**Severity level 4: Major**

Change in condition, life-threatening if not treated, change in condition may be permanent, may have required intensive care unit admit or emergent readmit to hospital, may have required invasive monitoring, required interventions such as electrical cardioversion or unanticipated intubation or required major invasive procedures or trans-catheter interventions to correct condition.

Examples:

> Haemodynamically unstable arrhythmias requiring DC (direct current) cardioversion or cardiopulmonary resuscitation

> Vascular damage which is life-threatening, results in significant extravasation or reduction of distal blood flow, requires major intervention to control extravasation or restore flow, or in which treatment does not restore flow or results in permanent significant reduction in distal flow after treatment

> Emergent surgery or heart lung bypass support (extracorporeal membrane oxygenation) to prevent death with successful recovery and wean from bypass support

**Severity level 5: Catastrophic**

Any complication associated with subsequent death

1. Bergersen L, Giroud JM, Jacobs JP, Franklin RC, Beland MJ, Krogmann ON, et al. Report from The International Society for Nomenclature of Paediatric and Congenital Heart Disease: cardiovascular catheterisation for congenital and paediatric cardiac disease (Part 2 - Nomenclature of complications associated with interventional cardiology). Cardiology in the young. 2011;21(3):260-5.