**Supplementary Material 1.** Traumatic Cardiac Arrest Treatment: Example of the Northern French Alps Emergency Network Procedure.

Standard operating procedures were recommended in the prehospital setting for the emergency medical team in the event of traumatic cardiac arrest (TCA): after deciding to start or continue advanced life support, it simultaneously recommends:

-Treating hypovolaemia:

* control external catastrophic haemorrhage by providing compression in an attempt to gain control and stem a bleed, and use tourniquets to control exsanguinating limb haemorrhage.
* perform external fixation with pelvic stabilisation in patients suspected of high-energy pelvic fractures and splint long bone fractures
* gain large bore intravenous access and initiate rapid crystalloid infusion

-Decompressing a potential tension pneumothorax

* perform a systematic bilateral thoracostomy after tracheal intubation by making a skin incision followed by blunt dissection with forceps or a finger through the intercostal muscles and pleura in the fourth intercostal space, in the midaxillary line. Audible release of air or observation that the lung is not adjacent to the thoracic wall enable diagnosis.
* protect skin incisions with chest seal with unique one-way valve

- Treating a penetrating trauma to the chest or epigastrium

* immediate transport for emergency thoracotomy of patients with loss of cardiac output and possibility of admission under 10 minutes
* inform the resuscitation team of the estimated time of arrival at the emergency room

(When Return of Spontaneous Circulation occurs, rapid transport to the trauma centre is recommended. Emergency physicians are trained in this procedure, such as performing an on-scene trauma thoracostomy).