Supplementary Information

Figure 1 – Description of the placement of the mechanical device

In case of a cardiac arrest, defibrillate as early as possible if indicated by rhythm. All these cases are witnessed and do not have a high volume load on the venous side. After defibrillation, start with chest compressions immediately if the patient does not obtain instantaneous return of spontaneous circulation. If the cardiac arrest situation has not been solved in a few minutes with manual chest compressions and/or defibrillations, apply the mechanical chest compression device and start chest compressions in 30:2 mode (30 chest compressions followed by two inflations of air/oxygen) for patients not intubated. The mechanical chest compression-device should be placed in the coronary catheterisation laboratory for quick access and deployment.

When the patient is intubated, switch to continuous chest compressions and a ventilation rate of 10/min. Follow steps 1-7 when applying the MCC device when in the coronary catheterisation laboratory.

1. Activate the LUCAS 2 device in the bag and take out the Back Plate.
2 and 3: Place the Back Plate with as short as possible stop in manual chest compressions.
4. Attach the support leg that is nearest to you to the Back Plate.
5. Attach the other support leg to the Back Plate.
6. The two support legs should look against the Back Plate. Listen for click.
7. Push the Suction Cup down with two fingers until the pressure pad touches the patient’s chest without compressing the chest.

Push ACTIVE (30:2) if the patient is not intubated. Push ACTIVE (continuous) if the patient is intubated to start the compressions.
Figure 2 – Fluoroscopic projections
Due to the massive amount of equipment brought to the coronary catheterization laboratory, it is necessary to organize dedicated zones for the material to avoid interference with the needed fluoroscopic projections. The interventionist should be able to use the following projections; Left anterior oblique (LAO) Cranial/Caudal Oblique, Right anterior oblique (RAO) Cranial/Caudal Oblique, Straight Caudal, Straight Lateral and Straight Cranial in monoplane during mechanical chest compressions, according to the arranged pictures below.