Mechanical active compression-decompression cardiopulmonary resuscitation (ACD-CPR) versus manual CPR according to pressure of end tidal carbon dioxide (P(ET)CO(2)) during CPR in out-of-hospital cardiac arrest (OHCA).

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**Overview:** In animal and human studies, measuring the pressure of end tidal carbon dioxide (P(ET)CO(2)) has been shown to be a practical non-invasive method that correlates well with the pulmonary blood flow and cardiac output (CO) generated during cardiopulmonary resuscitation (CPR). This study aims to compare mechanical active compression-decompression (ACD) CPR with standard CPR according to P(ET)CO(2) among patients with out-of-hospital cardiac arrest (OHCA), during CPR and with standardised ventilation.

**Conclusions:** In this hypothesis generating study mechanical ACD-CPR compared with manual CPR generated the highest initial, minimum and average value of P(ET)CO(2). Whether these data can be repeated and furthermore be associated with an improved outcome after OHCA need to be confirmed in a large prospective randomised trial.