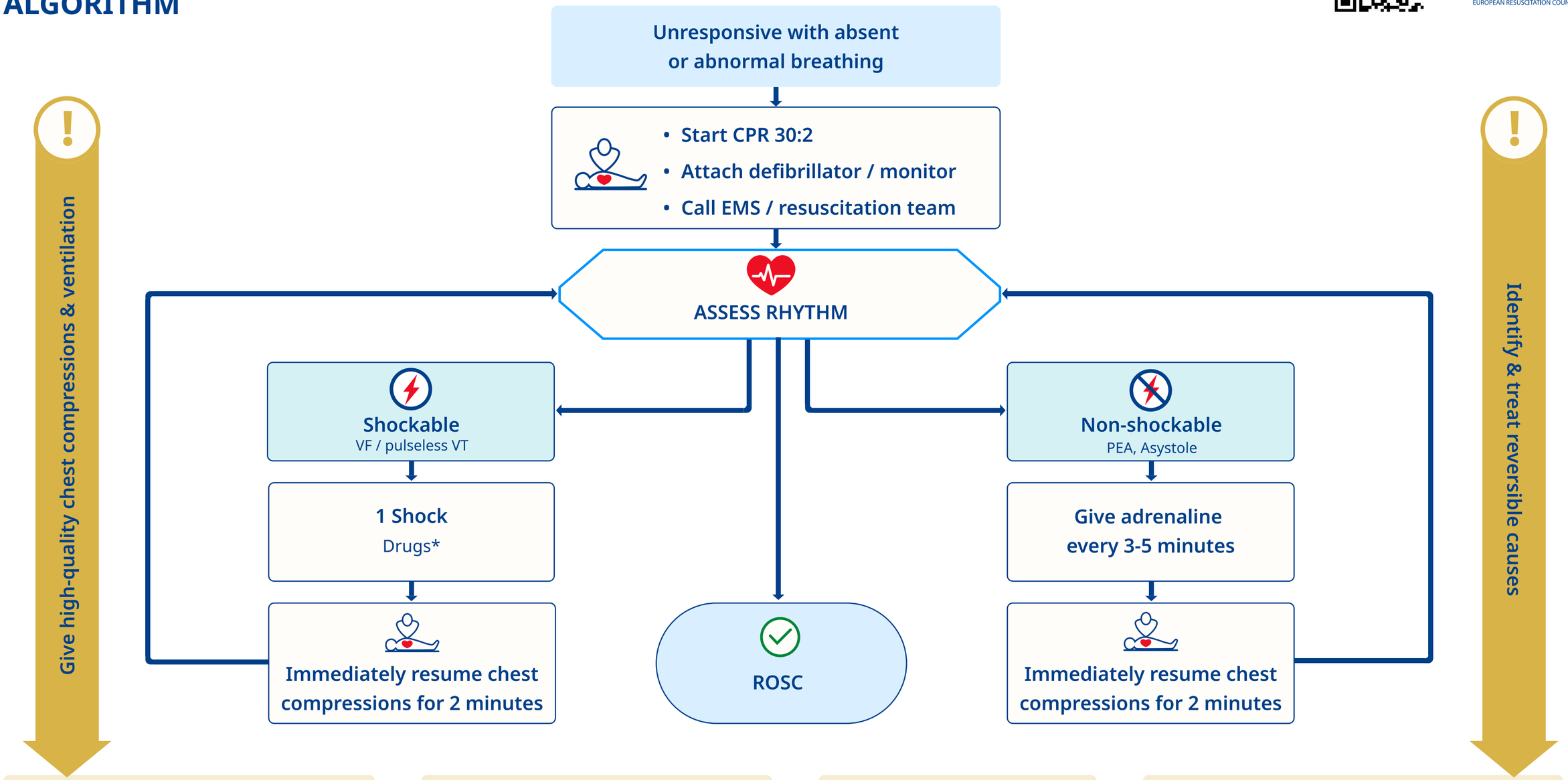
ADULT ADVANCED LIFE SUPPORT ALGORITHM

GUIDELINES 2025
EUROPEAN RESUSCITATION COUNCIL©



- Ensure optimal defibrillator pad placement
- Give oxygen
- Continuous compressions if tracheal tube or supraglottic airway
- Use waveform capnography
- Minimise interruptions to chest compressions
- Early IV access (IO if IV not possible)

* Drugs

- Give 1st adrenaline after 3 shocks, then every 3-5 minutes
- Give amiodarone after 3 shocks

Consider

- Changing pads to antero-posterior after 3 shocks
- Mechanical chest compressions to facilitate transfer / treatment
- Ultrasound to identify reversible causes
- Extracorporeal CPR and, or Coronary angiography/percutaneous coronary intervention

Immediately after ROSC

- Use ABCDE approach
- Aim for SpO_2 of 94-98% and normal $PaCO_2$
- Aim SBP > 100 mmHg
- 12 Lead ECG
- Identify and treat cause
- Temperature control

- Hypoxia
- Hypovolaemia
- Hyper-hypokalaemia / metabolic
- Hypothermia, hyperthermia
- Toxins
- Tamponade (cardiac)
- Tension pneumothorax
- Thrombosis (coronary / pulmonary)

ABCDE - airway, breathing, circulation, disability, exposure; CPR - cardiopulmonary resuscitation; ECG - electrocardiogram; EMS - emergency medical services; IO - intraosseous; IV - intravenous; PEA - pulseless electrical activity; $PaCO_2$ - arterial partial pressure of carbon dioxide; ROSC - return of spontaneous circulation; SBP - systolic blood pressure; SpO_2 - oxygen saturation measured with pulse oximetry; VF - ventricular fibrillation; VT - ventricular tachycardia.