Top Ten Things to Know

2018 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care with Treatment Recommendations Summary

1. Over 350,000 EMS-assessed cardiac arrests and 209,000 in-hospital cardiac arrests occur annually in the United States. Despite advances in resuscitation science, survival rates are only at best 11%.

2. This is the second in a series of annual ILCOR consensus on science with treatment recommendations (CoSTR) summaries based on ILCOR’s new adoption of continuous evidence evaluation (CEE). The CEE process enables the review of resuscitation and first aid science as it becomes available and disseminates the appropriate updated information to the public rapidly. Historically, ILCOR conducted a comprehensive evaluation of resuscitation science every 5 years. In 2015, ILCOR decided to implement a CEE process.

3. This second annual ILCOR CoSTR summary includes an update of resuscitation and first aid science that ILCOR reviewed within the past year with an emphasis on the role of antiarrhythmic drugs in cardiac arrest for adults and children.

4. This year’s annual summary document includes ILCOR’s evidence review of an advanced life support CoSTR and pediatric advanced life support CoSTR with GRADE methodology analyses and treatment recommendations.

5. In this summary document, values and preferences have been added to provide greater insight into the rationale for treatment recommendations and the top three knowledge gaps for each topic have been prioritized by Task Forces.

6. There is an update on the use of antiarrhythmic drugs in adults with shock refractory VF/pVT.

7. There is an update on the use of antiarrhythmic drugs in children with shock refractory vF/pVT.

8. Future studies are needed to investigate the prophylactic role of antiarrhythmic drugs in cardiac arrest.

9. One of the primary measures to improve survival after cardiac arrest has been focused to not only improve CPR quality, but also provide early appropriate intervention coupled with CPR and defibrillation.

10. Survival from both in-hospital cardiac arrest (IHCA) and out-of-hospital Cardiac arrest (OHCA) has increased over the past decade, but there is still tremendous potential for improvement. The treatment recommendations in this 2018 ILCOR CoSTR summary for Adult and Pediatric Advanced Life Support and CPR quality aim to provide information on the role of antiarrhythmic drugs for cardiac arrest.