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Letter to the Editor

Author response: A critique of the recent 2018 ERC CPR guidelines



Thank you for the opportunity to reply to Dr Lederman's critique of the European Resuscitation Council (ERC) Guidelines for Resuscitation: 2018 Update - Antiarrhythmic drugs for cardiac arrest.¹ Firstly, the ERC Guideline update follows the publication of the International Liaison Committee on Resuscitation (ILCOR) Consensus on Science and Treatment Recommendations (CoSTR) and a systematic review of all the available evidence rather than the results of a single randomised controlled trial.^{2,3,4} After reviewing all the available evidence, the ILCOR consensus was that there is very little difference between amiodarone and lidocaine, and we cannot be confident that one drug is better than the other for both critical outcomes such as survival to discharge with good neurological function, and important outcomes such as ROSC (return of spontaneous circulation). In the ERC 2018 guideline update some of the values and preferences discussed by the ILCOR Advanced Life Support Task Force are included. We believe it was right that those reviewing the science considered the pros and cons of firstly using an antiarrhythmic drug given the uncertain evidence about long-term outcomes and the potential benefits and harms of achieving ROSC, and the factors that will determine which drug is chosen (training, cost, availability). One of the issues addressed by the ILCOR CoSTR was the possibility that an increase in ROSC without an increase in overall survival may lead to an increased number of solid organ donors. Observational data suggests this might be the case. In the UK, an increase in the number of patients with ROSC after cardiac arrest admitted to intensive care units (ICUs) was associated with an increase in organ donation from those patients who then died on the ICU.⁵ This issue of organ donation is a topic that ILCOR is reviewing further. Both ILCOR and the ERC work with individuals who have considerable expertise in both science and ethical issues, and when necessary consult other international experts. In addition, prior to final publication, each ILCOR CoSTR is open for a public comment period at <https://costr.ilcor.org/>. Social scientists, ethicists, clinicians, patients and the public are encouraged to provide their views and opinions to help inform treatment recommendations and values and preferences.

As written, the ERC guideline update will enable the individual national councils to decide whether they recommend amiodarone or lidocaine. In doing this an important factor to consider is how easy it is to change current practice — our survey of national resuscitation councils shows that most will continue to recommend the drug they currently recommend, and in most cases this is amiodarone.

Conflict of interest statement

All authors and contributors have formal roles within the ERC and their respective National Resuscitation Councils. JPN is Editor-in-Chief of Resuscitation. JS and GDP are Editors of Resuscitation.

REFERENCES

1. Soar J, Perkins GD, Maconochie I, et al. European Resuscitation Council Guidelines for Resuscitation: 2018 Update - Antiarrhythmic Drugs for Cardiac Arrest. *Resuscitation* 2019;134:99-103.
2. Soar J, Donnino MW, Maconochie I, et al. 2018 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations Summary. *Resuscitation* 2018;133:194-206.
3. Soar J, Donnino MW, Maconochie I, et al. 2018 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations Summary. *Circulation* 2018;138:e714-30.
4. Ali MU, Fitzpatrick-Lewis D, Kenny M, et al. Effectiveness of antiarrhythmic drugs for shockable cardiac arrest: a systematic review. *Resuscitation* 2018;132:63-72.
5. Nolan JP, Ferrando P, Soar J, et al. Increasing survival after admission to UK critical care units following cardiopulmonary resuscitation. *Crit Care* 2016;20:219.

Jasmeet Soar*
Gavin D. Perkins
Koenraad G. Monsieurs
Jerry P. Nolan
European Resuscitation Council, Emile Vanderveldelaan 35, BE-2845, Niel, Belgium

* Corresponding author.

E-mail address: jasmeet.soar@nbt.nhs.uk (J. Soar).

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