

ZOLL AutoPulse in the 2015 AHA Guidelines



Frequently asked questions about automated CPR, and the ZOLL AutoPulse®, in the new AHA Guidelines

Is the AutoPulse recommended in the 2015 AHA Guidelines?

Yes, the AutoPulse Resuscitation System is recommended in the 2015 AHA Guidelines.

The Guidelines recommend the AutoPulse as a reasonable alternative to manual CPR in settings where the delivery of high-quality manual CPR may be challenging or dangerous to the provider. These situations include, but are not limited to: prolonged CPR, limited rescuers available, CPR in a moving ambulance, in the angiography suite, and during preparation for extracorporeal CPR.¹

What do the two largest clinical trials (>4,000 patients each) evaluating the use of an automated CPR device, referenced in the Guidelines, illustrate?

The AHA Guidelines state that the largest trial evaluating AutoPulse (CIRC) showed equivalency between AutoPulse and high-quality manual CPR, while the largest trial evaluating LUCAS (PARAMEDIC) did not demonstrate a benefit between LUCAS and manual CPR.^{1,2} However, only the CIRC was proven to have the highest overall survival rate (Table 1)¹.

Meanwhile, the AHA Guidelines further state that the PARAMEDIC study demonstrated a negative association between LUCAS and survival with good neurologic outcome at 3 months as compared with manual compressions.

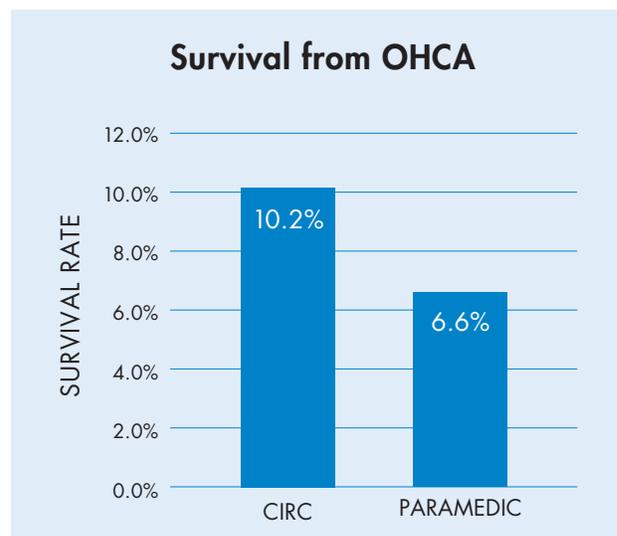


Table 1

At 10.2%, survival in the CIRC trial was among the highest ever achieved in an OHCA trial.¹ Survival in the PARAMEDIC trial was just 6.6%.²

Is the AutoPulse recommended for use in the cath lab in the 2015 AHA Guidelines?

Yes. The AHA Guidelines state that it is "reasonable to use mechanical CPR devices to provide chest compressions to patients in cardiac arrest during PCI."

Does any automated CPR device have clinical evidence to answer the AHA Knowledge Gap—“Are mechanical chest compression devices superior to manual chest compressions in special situations such as a moving ambulance, prolonged CPR, or procedures such as coronary angiography?”¹

YES—ONLY THE AUTOPULSE. The AHA Guidelines were published in October 2015, and just a few months later an analysis of the CIRC trial was published specifically to focus on prolonged CPR. This analysis concluded that the AutoPulse showed a significant survival-to-discharge benefit when compared with manual CPR when CPR efforts lasted longer than 16 minutes.³ Of the greater than 4,000 patients evaluated in the analysis of this trial, almost 70% of resuscitation events lasted 16 minutes or longer (Table 2).

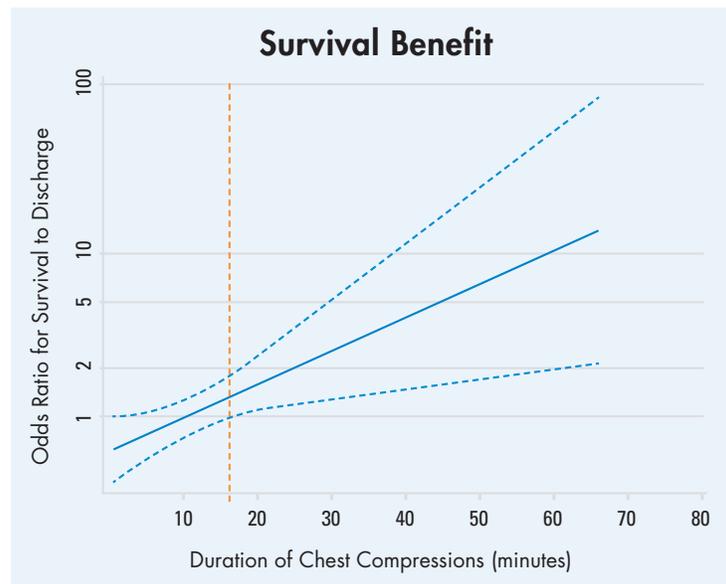


Table 2
An analysis of the CIRC trial showed the longer the resuscitation effort, the greater the survival benefit with the AutoPulse when compared to manual CPR.³

¹Brooks SC, et al. *Circulation*. 2015;132[suppl 2]:S436-S443.

²Wik L, et al. *Resuscitation*. 2014;85:741-748.

³Perkins GD, et al. *The Lancet*. 2015;385[9972]:947-955.

⁴Olsen JA, et al. *Acta Anaesthesiologica Scandinavica*. 2015.

To learn more about the AutoPulse, and the benefits it provides to patients in cardiac arrest, please visit www.zoll.com

