LUCAS® 3, v3.1
chest compression system

By the numbers

16,830

Guidelines-consistent compressions administered during a successful two hour and 45-minute resuscitation[1]

50,000

devices deployed globally

102-111-120

The LUCAS device delivers Guidelines-consistent rates, now configurable* to 102-111-120 per minute, without sacrificing compression depth

7 seconds

median interruption when transitioning from manual to LUCAS device compressions during routine BLS/ALS use[2]

35-40%

of total compression depth is accounted for by mattress compression during manual CPR[3,4]

80%

CPR causes back pain in more than 80 percent of nurses who perform it[5]

Cath lab use

The carbon fiber LUCAS PCI back plate (optional) is designed to minimise image shadows when used in a cath lab

+60%

increased blood flow to the brain vs. manual CPR[6]

21%

increase of mean average $EtCO_2$ compared to manual CPR[7]

>99%

of survivors at 6 months follow up had good neurological outcomes in large randomised LINC trial[8]

> "The LUCAS device is a piece of equipment that will change practices and change lives"
>
> – Kathryn Spears
> Clinical Nurse Consultant | Liverpool Hospital[9]

*With LUCAS 3, v3.1 chest compression system

References

1. Case study Regions Hospital St. Paul, GDR 3318844_A.
2. Levy M, Yost D, Walker R, et al. A quality improvement initiative to optimise use of a mechanical chest compression device within a high performance CPR approach to out-of-hospital cardiac arrest. *Resuscitation*. 2015;92:32-37.
3. Perkins GD, Kocierz L, et al. Compression feedback devices over estimate chest compression depth when performed on a bed. *Resuscitation*. 2009; 80: 79-82.
4. Jolife AB internal test report on file FAD20181012-1
5. Jones A. Can cardiopulmonary resuscitation injure the back? *Resuscitation* 2004; 61:63-67
6. Carmona Jimenez F, Padro P, Garcia A, et al., Cerebral flow improvement during CPR with LUCAS, measured by Doppler. *Resuscitation*. 2011; 82S1:30,AP090. [This study is also published in a longer version, in Spanish language with English abstract, in Emergencias. 2012;24:47-49]
7. Axelsson C, Karlsson T, Axelsson A, et al. Mechanical active compression-decompression cardiopulmonary resuscitation (ACDCPR) versus manual CPR according to pressure of end tidal carbon dioxide (PETCO2) during CPOR in out-of-hospital cardiac arrest 9OHCA). *Resuscitation*. 2009;80(10):1099-1103.
8. Rubertsson S, Lindgren E, Smekal, D et al. Mechanical chest compressions and simultaneous defibrillation vs conventional cardiopulmonary resuscitation in out-of-hospital cardiac arrest. The LINC randomised trial. *JAMA*. 2013;311(1):53-61.
9. Case study, The Miracle Man Australia, GDR 3332139_A

For further information, please contact your Stryker representative or visit our website at stryker.com

Emergency Care

05/2022
M0000008476 REV AA

CE 2460 **Class IIb**

Jolife AB
Scheelevägen 17
Ideon Science Park
SE-223 70 Lund
Sweden

Stryker European
Operations Ltd.
Herikerbergweg 110
1101 CM Amsterdam
Netherlands
Tel +31 (0)43 3620008
Fax +31 (0)43 3632001