ARCHEON MEDICAL

EOlife®

ASSISTING VENTILATION
WHEN EVERY SECOND COUNTS

EFFECTIVE VENTILATION = IMPROVED SURVIVAL[1]

Medidyne MAKING A DIFFERENCE

EOlife® is a smart device that measures the quality of manual ventilations in adults.

EOlife® is a smart system that measures ventilation parameters and provides real-time feedback on the quality of manual ventilation based on the patients profile.

This medical device is designed to manage adult patients in cardiopulmonary or respiratory arrest. It is designed for use by Advanced & Basic Life Support providers.

Cardiac arrest is still the leading cause of death worldwide and survival rates remain below 5%.

One of the main challenges facing emergency first aid teams is providing patients with enough oxygen, whilst avoiding hyperventilation which, according to recent international studies, occurs in almost 80% of cases. [2,3,4]

A major increase in ventilation performance, from 15% to 90% adequate ventilation, has been demonstrated in simulated conditions on intubated and non-intubated manikins. [5]

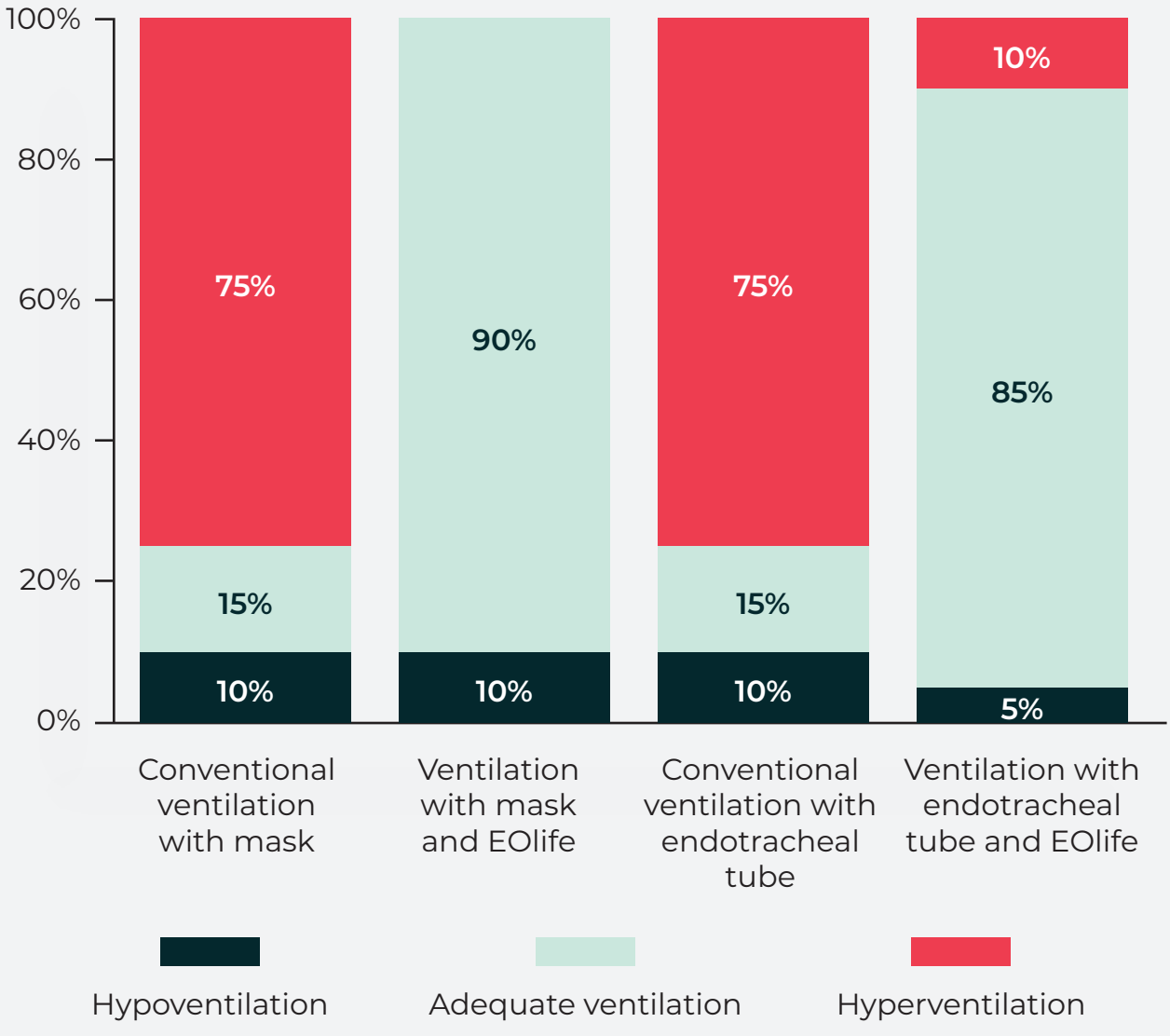
EOlife® improves
manual ventilation efficacy by over **70 %** [5]

Why is hyperventilation highly detrimental to the patient?

Hyperventilation is a combination of high tidal volumes and high ventilation rates which leads to an increase in intrathoracic pressure.

This phenomenon increases the risk of aspiration, venous return, increases right ventricular afterload and lowers cardiac output. This results in poor cerebral perfusion. [2,6]

Hyperventilation risks are reduced by a factor of 10 with EOlife®



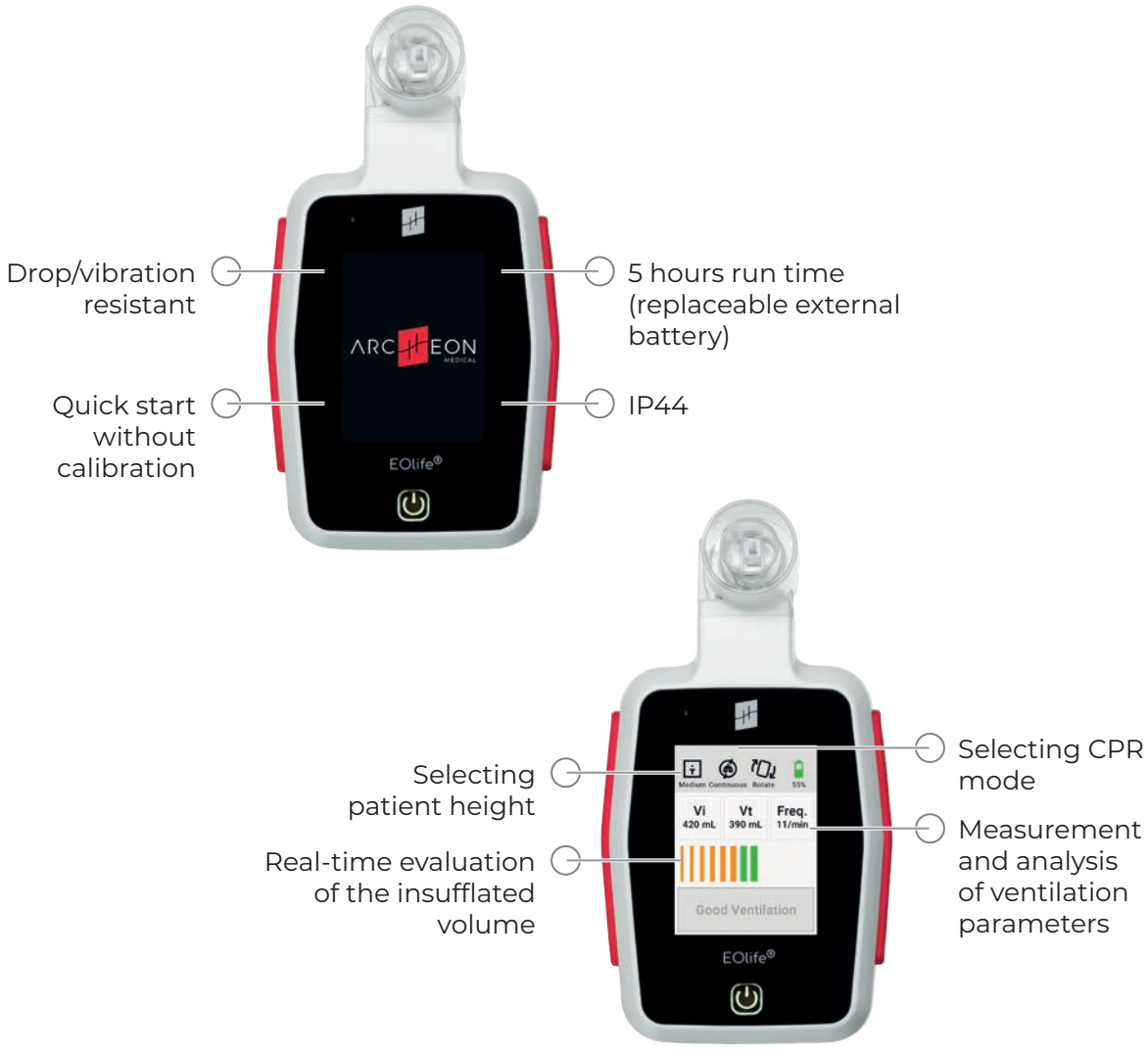
Effective ventilation doubles the survival rate

(10,3 % VS 4,0 %) of patients in cardiac arrest on admission to hospital.

This is the conclusion of an American study carried out on 560 adult patients in cardiopulmonary arrest. [1]

Characteristics and advantages

EOlife is a compact and ergonomic electronic device (weight = 150 g ± 5 g; dimensions 7.5 × 13.5 × 3 cm) designed for emergency conditions.



Ventilation aid via CPR instructions

Smart alarm prioritisation system

Ventilation data recording and export

Statistical report at the end of the ventilation

FlowSense® sensor

FlowSense® is a biocompatible digital flow sensor.
It is easily replaceable and single use to eliminate contamination risks between patient.

- Dead space < 10 mL
- Auto-calibration from -20°C to +50°C
- No air flow resistance
- Very high accuracy (± 4 % of the actual value)

Legal information

EOlife® is a Class I medical device designed for the manual ventilation of adult patients in cardiopulmonary arrest. Training and a careful review of the manufacturer's instruction manual is required before using the device. EOlife is intended for use by healthcare professionals and emergency responders trained to treat patients in cardiopulmonary or respiratory arrest in accordance with the European Resuscitation Council (ERC) Guidelines.

EOlife® has been tested and approved in accordance with the following international standards:
EN 60601-1:2006/A1:2013/A12:2014/A1:2013/A11:2017, EN 60601-1-12:2015, EN 60601-1-2:2015, EN ISO 5356-1:2015, ISO 18562-1:2017, ISO 18562-2:2017, ISO 18562-3:2017, EN ISO 15223-1:2016, EN 1041:2008/A1:2013

Products and accessories references

References	Description
A0000055	**EOlife** *Packaged EOlife in cardboard-case contains one EOlife with an external battery and its charger.*
A0000060	**EOlife Premium Pack** *Premium EOlife Kit in a carrying-case containing one EOlife with 2 FlowSense, 2 batteries, one charger and a kit-bag.*
A0000044	**FlowSense** *Flowsense is a single use digital mass flowmeter dedicated to EOlife to work in specific emergency settings. It is sold in bach of 10 pieces.*
A0000051	**EOlife Battery** *Additional external battery.*
A0000029	**EOlife Charger** *Additional charger.*
A0000033	**EOlife Kit-bag** *Carrying case, can carry an EOlife, 2 FlowSense sensors and an additional battery.*
A0000036	**EOlife Carrying-case** *Carrying-case can hold an EOlife, 2 FlowSense sensors, an additional battery, a charger and a kit bag.*

Bibliographical references

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3. Khoury A, Sall FS, De Luca A, Pugin A, Pili Floury S, Pazart L, Capellier G. Evaluation of Bag Valve Mask Ventilation in Manikin Studies: What Are the Current Limitations? Biomed Res Int. 2016; 2016: 4521767
4. O'Neill JF and Deakin CD. Do we hyperventilate cardiac arrest patients? Resuscitation. 2007;73:82-85
5. Khoury A, De Luca A, Sall FS, Pazart L, Capellier G. Ventilation feedback device for manual ventilation in simulated respiratory arrest a crossover manikin study Scand J Trauma Resusc Emerg Med. 2019 Oct 22;27(1):93
6. Aufderheide TP and Lurie KG Death by hyperventilation a common and life threatening problem during cardiopulmonary resuscitation. Crit Care Med 2004;32(9): 345-351

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