

## ResQPOD® Impedance Threshold Device

The ResQPOD is an impedance threshold device (ITD) that provides **Perfusion on Demand** (POD) by regulating pressures in the thorax during states of hypotension.

Animal and clinical studies\* have shown that during CPR, the ResQPOD:

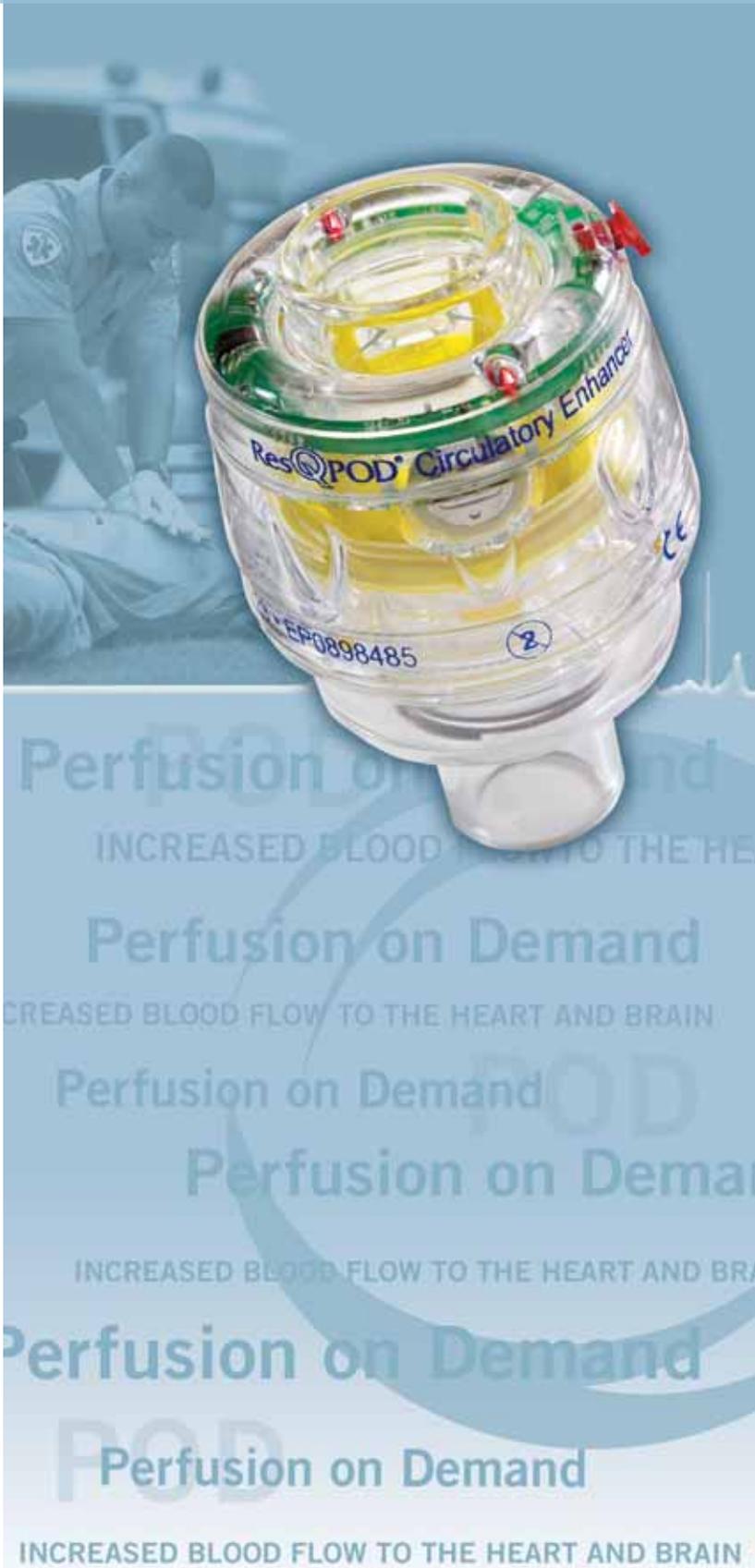
- Doubles blood flow to the heart
- Increases blood flow to the brain by 50%
- Doubles systolic blood pressure
- Increases survival rates
- Increases the likelihood of successful defibrillation
- Provides benefit in all arrest rhythms
- Circulates drugs more effectively

The American Heart Association (AHA), in their 2005 guidelines, designated the impedance threshold device (e.g., ResQPOD) a Class IIa recommendation for increasing blood flow and immediate survival rates in patients in cardiac arrest. It is the most highly recommended CPR adjunct in the new guidelines and carries a higher recommendation than any medication used to increase circulation in adults in cardiac arrest. The ResQPOD is the only impedance threshold device on the market.

The ResQPOD is easy to use. It provides a unique way to increase circulation during CPR by refilling the heart after each chest compression. In addition, timing assist lights on the ResQPOD provide guidance on the proper compression and ventilation rates.

### How It Works

The ResQPOD prevents unnecessary air from entering the chest during CPR. As the chest wall recoils, the vacuum (negative pressure) in the thorax is greater. This enhanced vacuum pulls more blood back to the heart, doubling blood flow during CPR. Studies have shown that this mechanism increases cardiac output, blood pressure and survival rates. Patient ventilation and exhalation are not restricted in any way.





## Performing Adult CPR

1. Begin using the ResQPOD and performing chest compressions as soon as cardiac arrest is confirmed. Do not delay chest compressions!
2. Provide chest compressions at a depth of 1.5–2" and a rate of 100/min. Timing assist lights can be used to guide the chest compression/release rate: 100/min = 10 compressions/light flash.
3. Assure that the chest wall recoils completely after each compression.
4. Ventilate over 1 second (until the chest rises) with both secured and unsecured airways; do **not** hyperventilate!
5. Avoid unnecessary delays or interruptions in chest compressions.
6. Remove the ResQPOD if a pulse returns.



*An impedance threshold device is recommended in the 2005 AHA guidelines as the only Class IIa CPR device to improve hemodynamics and increase the return of spontaneous circulation during cardiac arrest.*

### Using the ResQPOD —on a Facemask

1. Connect the ResQPOD to the facemask.
2. Open the airway. Establish and maintain a tight face seal with the mask throughout chest compressions; a head strap or 2-handed technique is recommended.
3. Connect the ventilation source to the ResQPOD, or mouthpiece if performing mouth-to-mask ventilation.
4. Perform CPR at the recommended compression-to-ventilation ratio (30:2).

### Using the ResQPOD —on an ET Tube

1. Confirm ET tube placement and secure it with a commercial tube restraint.
2. Connect the ResQPOD to the ET tube.
3. Connect the ventilation source to the ResQPOD.
4. Perform continuous chest compressions (100/min).
5. Remove the clear tab and turn on the timing assist lights. Ventilate asynchronously at the timing light flash rate of 10/min.
6. Administer ET meds directly into the ET tube.
7. Place ETCO<sub>2</sub> detector between the ResQPOD and the ventilation source.



\* The generally cleared indication for the ResQPOD is for a temporary increase in blood circulation during emergency care, hospital, clinic and home use. Studies are ongoing in the United States to evaluate the long-term benefit of the ResQPOD for indications related to patients suffering from cardiac arrest, hypotension during dialysis and severe blood loss. This information is not intended to imply specific outcome-based claims not yet cleared by the US FDA.