



Oscillating Positive  
Expiratory Pressure Therapy System



## Empowering COPD Patients

To Breathe Better, Live Better  
by Reducing Exacerbations<sup>4</sup>

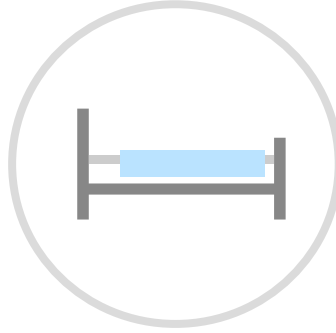
**77%** of COPD patients have experienced an exacerbation leading to an increased risk of hospitalization and disease progression.<sup>1</sup>



## Globally COPD...



is the **3<sup>rd</sup>** leading cause of death<sup>2</sup>



has more than **251 million** cases<sup>2</sup>



leads to more than **3 million deaths<sup>2</sup>** each year

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## The **countdown** to her **next COPD exacerbation** has **already begun**



Acute exacerbations result in:

- **Decline** in lung function<sup>3</sup>
- **Poorer quality** of life<sup>3</sup>
- **Increased** mortality risk<sup>3</sup>
- **Frequent** hospital admissions, relapses and readmissions<sup>3</sup>

**1 in 5** patients **hospitalized for a COPD exacerbation** requires **rehospitalization within 30 days<sup>4</sup>**

# Aerobika

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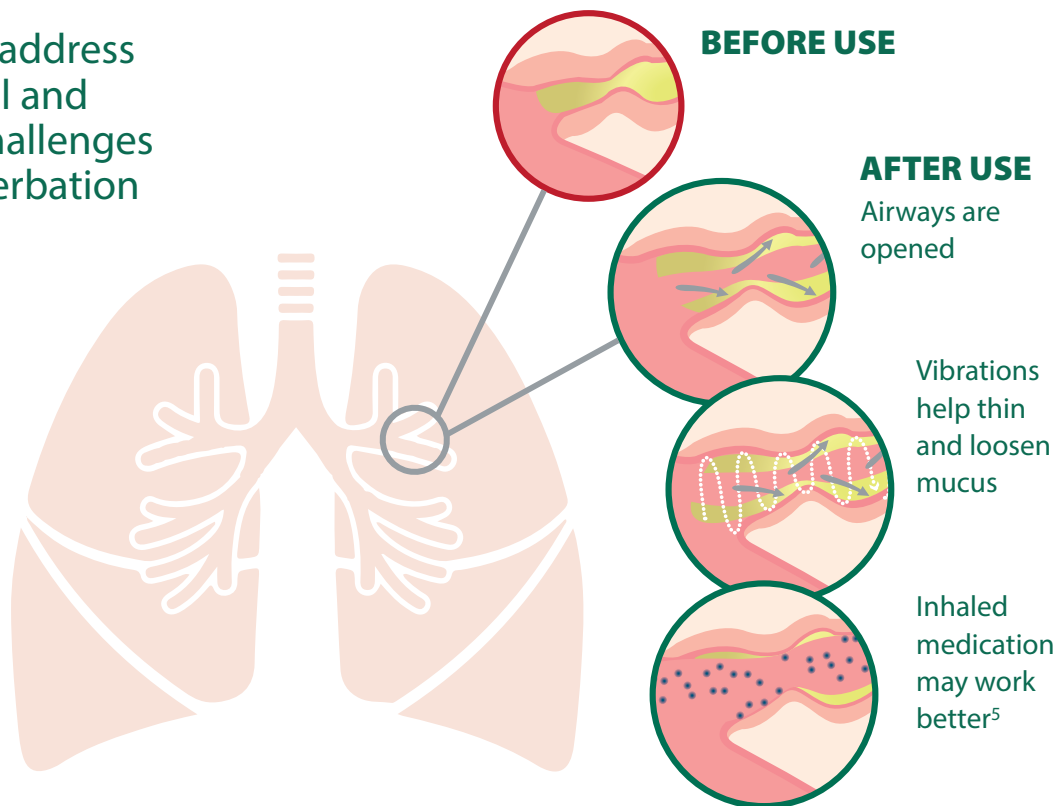
The **Aerobika**\* device works to address the structural and functional challenges in the airways of patients with COPD.

In a real-world study with COPD patients with chronic bronchitis, the **Aerobika**\* device is **clinically proven to reduce exacerbations, increase lung function, and improve patient quality of life.**<sup>4</sup>



## How the **Aerobika**\* Oscillating Positive Expiratory Pressure (OPEP) device works

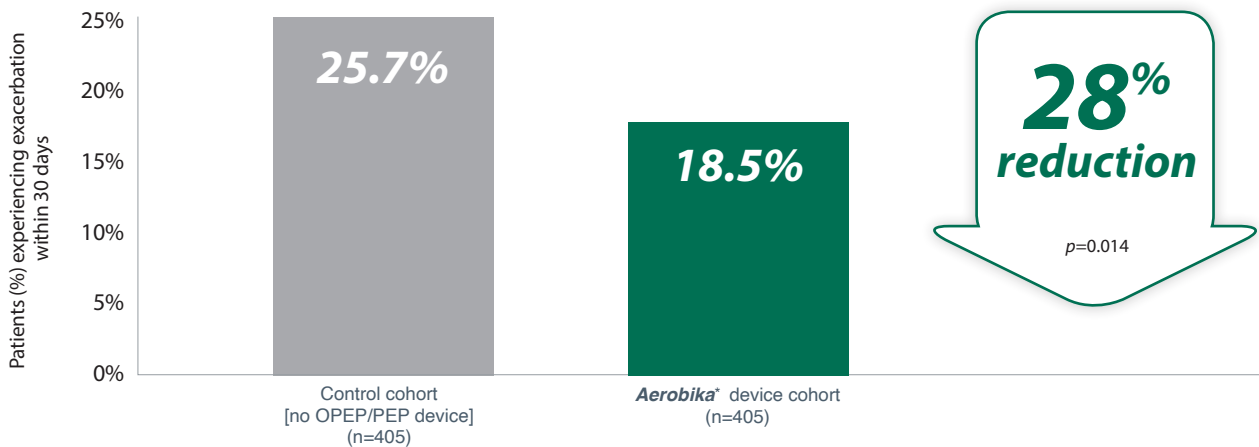
Designed to address the structural and functional challenges in post-exacerbation airways



**Mucus clearance** can reduce breathlessness, prevent recurring infection, reduce exacerbations, hospitalizations and improve quality of life.<sup>6</sup>



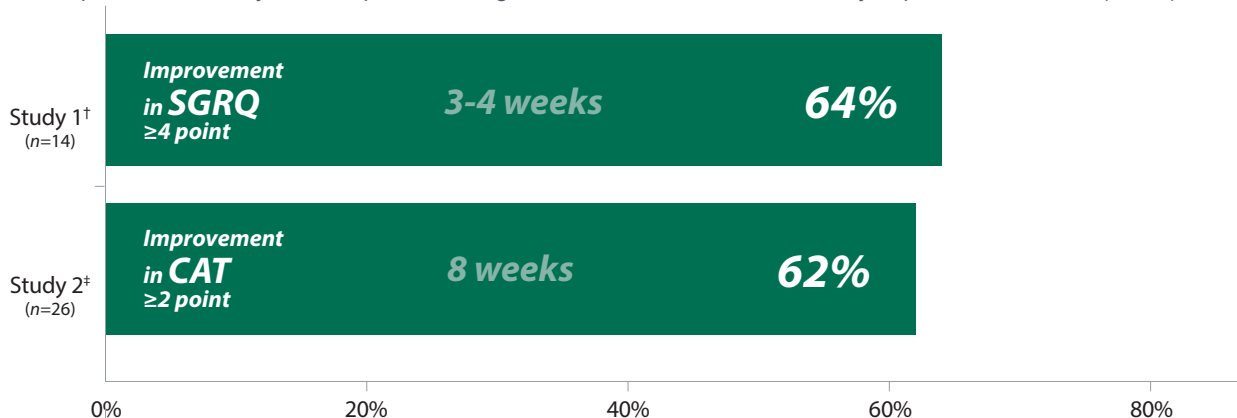
**Reduces COPD exacerbations**  
by 28% in the critical 30 day period<sup>4</sup>



Real world study measured the rate of early (30-day) moderate-to-severe exacerbations and related costs in COPD patients with chronic bronchitis. Moderate-to-severe exacerbation is defined as a hospitalization or an emergency department visit.

**Improves Quality of Life in COPD Patients<sup>7</sup>**

Responder rate analysis for improvements greater than the Minimum Clinically Important Difference (MCID)

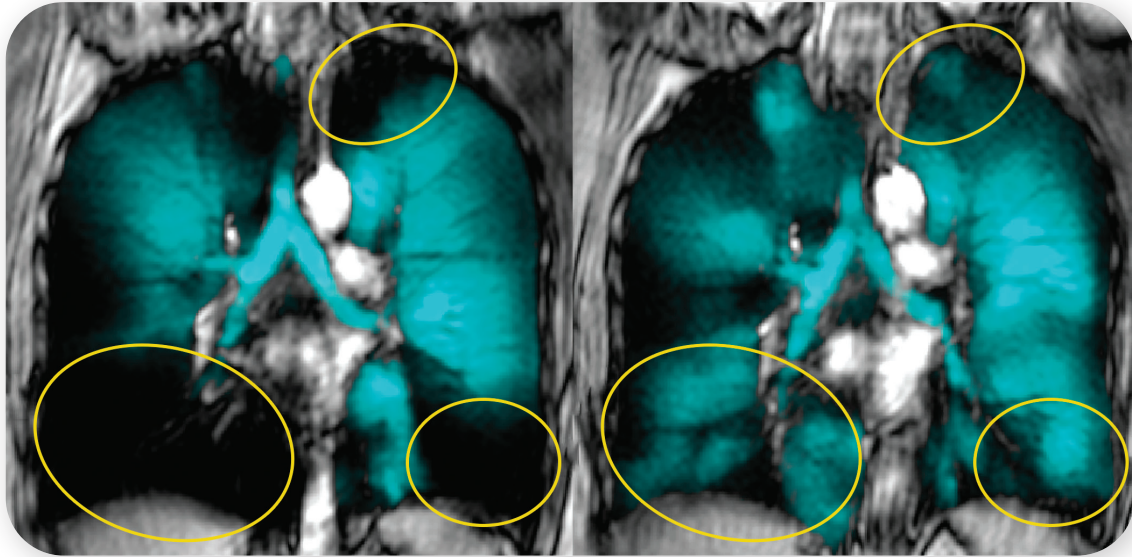


† Randomized cross-over study evaluating four-times daily Aerobika® device use after 3-4 weeks of treatment in COPD patients with chronic bronchitis.  
‡ Clinical assessment of COPD patients with chronic bronchitis over 8 weeks of treatment with the Aerobika® OPEP device.  
St. George's Respiratory Questionnaire (SGRQ) measures impact on overall health, daily life and perceived well-being in airways disease; MCID≥4  
COPD Assessment Test (CAT) assesses impact of COPD on health status; MCID≥2

## Improves Ventilation in COPD Patients<sup>6</sup>

**Before**  
Baseline care (no OPEP/PEP device)

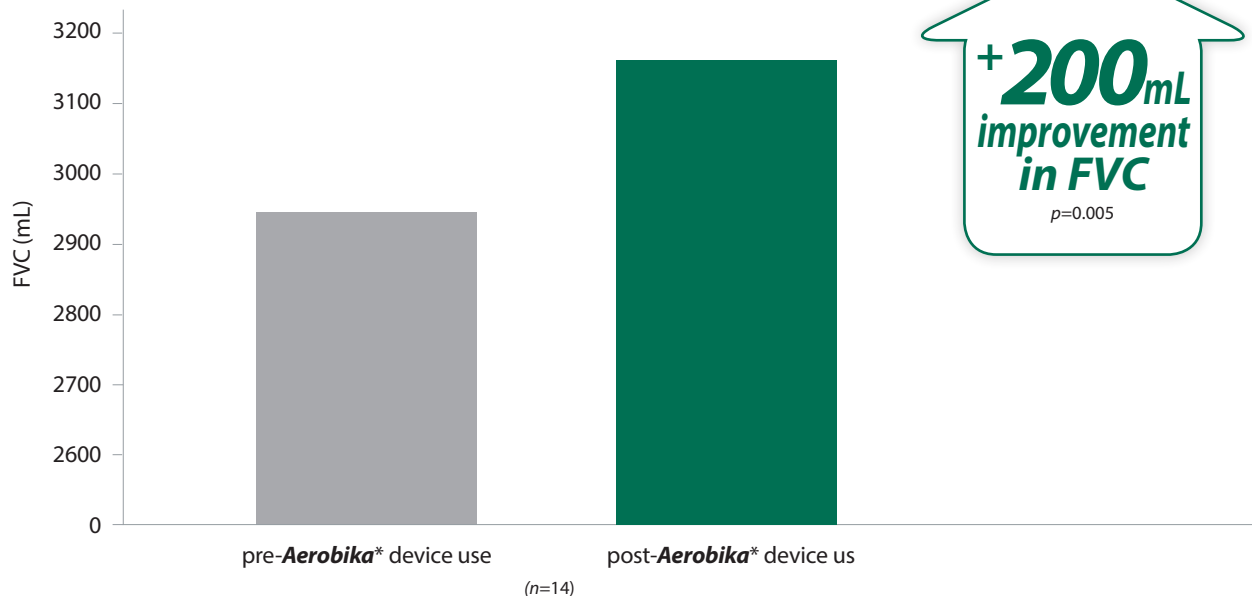
**After**  
Baseline care plus **Aerobika\*** device



Teal colour and intensity show areas with gas distribution. Yellow circles represent areas of greatest change after 3-4 weeks of **Aerobika\*** device use.

Randomized cross-over study evaluating four-times daily **Aerobika\*** device use after 3-4 weeks of treatment in patients with COPD and chronic bronchitis. Hyperpolarized helium-3 (3He) magnetic resonance imaging (MRI) ventilation in representative sputum producer.

## Improves Lung Function in COPD Patients<sup>6</sup>



Randomized cross-over study evaluating four-times daily **Aerobika\*** device use after 3-4 weeks of treatment in COPD patients with chronic bronchitis. FVC=forced vital capacity

## Efficiency and Effectiveness<sup>8</sup>

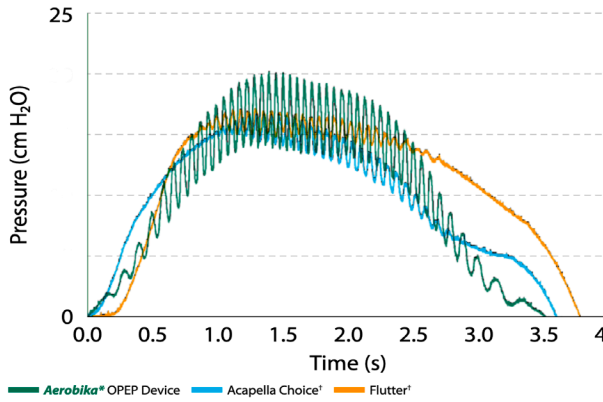
- ✓ Oscillations occur from the start through the end of the breath
- ✓ The amplitude of the oscillations is high and consistent
- ✓ Frequency of the oscillations mimics natural airway cilia movement

Percentage of exhaled breath with oscillations

**81%** Aerobika<sup>+</sup> device  
**67%** Acapella Choice<sup>†</sup>  
**62%** Flutter<sup>†</sup>

Average oscillation pressure amplitude (cm H<sub>2</sub>O)

**13.9** Aerobika<sup>+</sup> device  
**5.8** Acapella Choice<sup>†</sup>  
**3.0** Flutter<sup>†</sup>



Adapted from Meyer and Suggett, poster presented at CHEST 2017.<sup>8</sup>

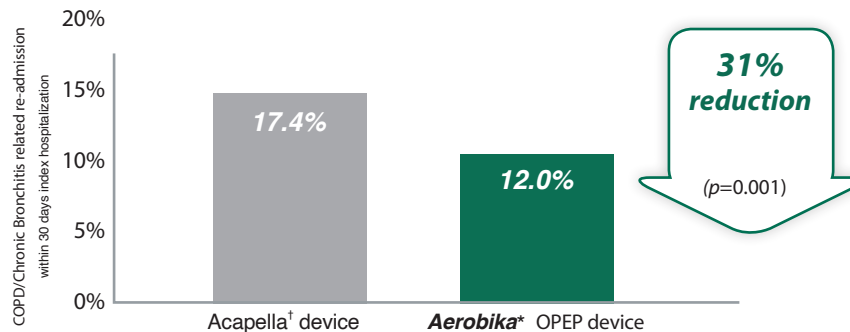
The **Aerobika<sup>+</sup>** OPEP device was the most efficient and effective OPEP device tested *in vitro*<sup>8</sup>

## Aerobika<sup>+</sup> OPEP Device compared to Acapella<sup>†</sup>

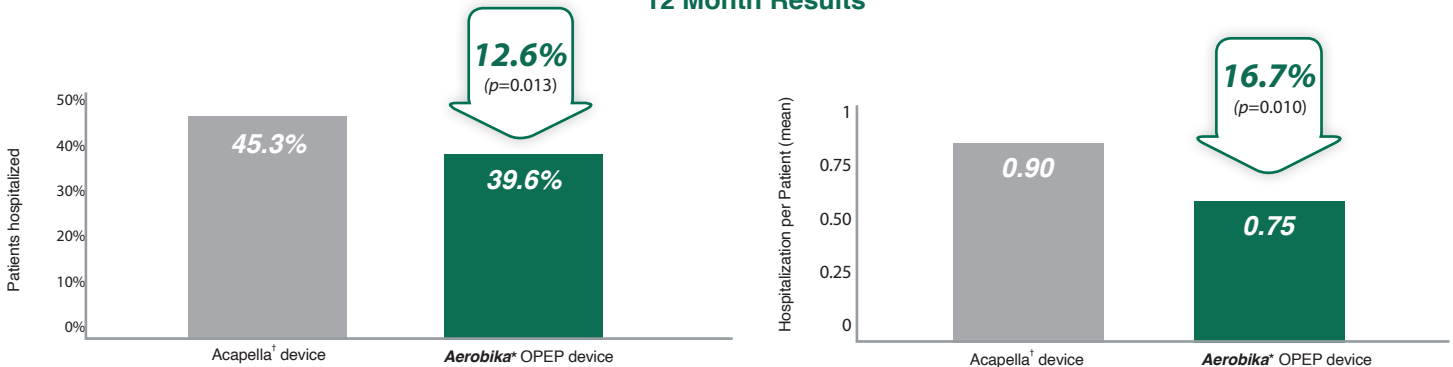
Real world evidence among Chronic Obstructive Pulmonary Disease (COPD) patients with chronic bronchitis on Hospital Readmissions at 30 Days and 12 Months

n = 619 Aerobika<sup>+</sup> OPEP Device    n = 1857 Acapella

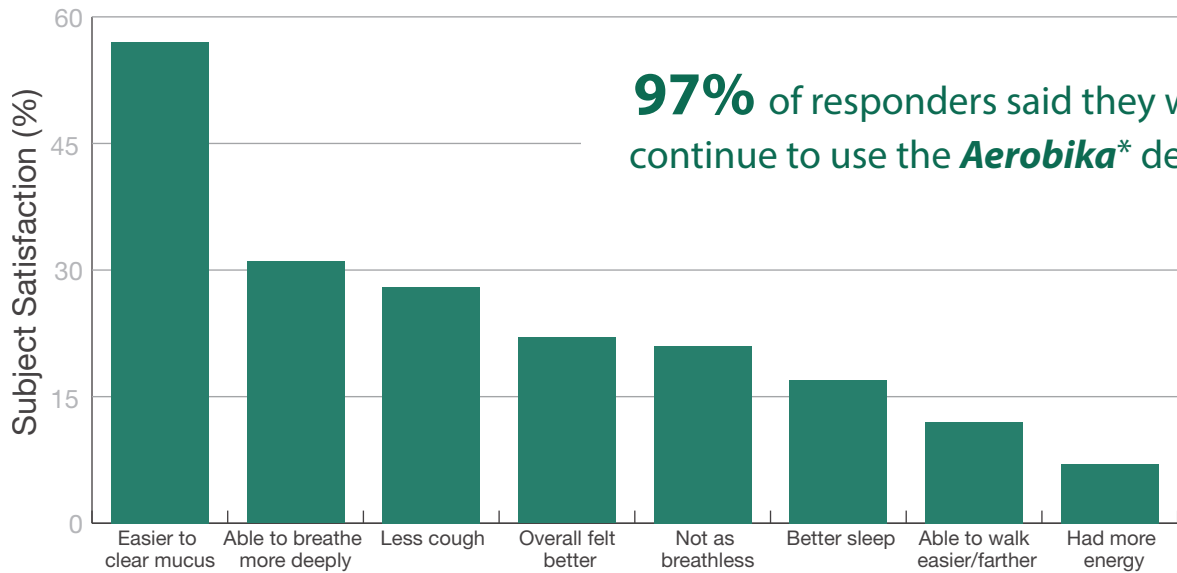
### 30 Days Results



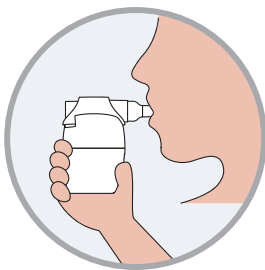
### 12 Month Results



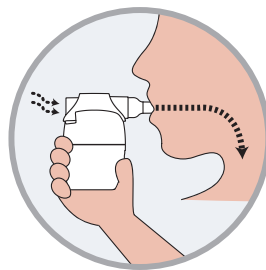
## COPD Patients Feedback Survey



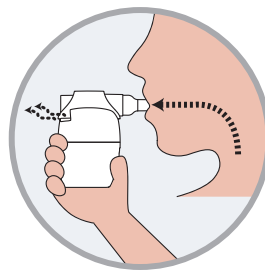
### How to Use



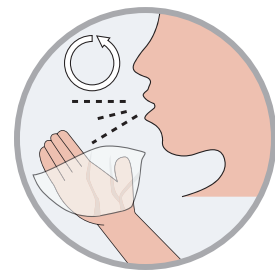
**1** CLOSE LIPS  
around mouthpiece



**2** INHALE and HOLD  
2-3 seconds



**3** EXHALE—slowly,  
steadily, firmly



**4** REPEAT and  
huff cough

**Administer for 10 minutes, twice daily.**

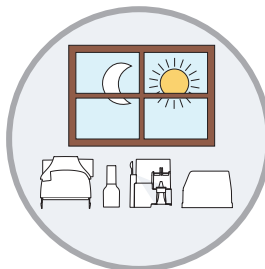
### How to Clean



**1** WASH  
in soapy water



**2** RINSE  
in clean water



**3** AIR DRY  
thoroughly



**DISHWASHER SAFE**  
top rack in basket



## Drug-free

- Handheld mechanical device designed to address the structural and functional challenges in the airways of patients with COPD

## Clinically Proven to

- **Reduce** exacerbations<sup>4</sup>
- **Improve** lung ventilation and function<sup>4</sup>
- **Enhance** patient quality of life<sup>4</sup>

## Easy to Use

- Disassembles into 4 parts for ease of cleaning and disinfection
- Position independent
- Inhale and exhale without removing from mouth
- Adjustable resistance settings
- Oscillations are maintained from the start to the end of each breath



Prescribe the **Aerobika<sup>\*</sup>** device as an add-on to **usual COPD treatment.**



1. Neil Barnes et al; COPD and exacerbations: Patient insights. BMC Pulmonary Medicine 2013. 2.WHO Report on COPD Causes of death Globally : [https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd)) last visited on 26th Oct 2020 3. Bourbeau et al; CTS position statement: Pharmacotherapy in patients with COPD. Canadian J. of resp. cric. Care and sleep medicine 2017 vol.1. 4. Burudpakee et al; Pulm Ther 2017 DOI: 10.1007/s41030-017-0027-5 5. Glenn Leemans et al; COPD Functional resp.imaging. International J. of COPD 2020. 6. Svenningsen S. et al. Oscillatory Positive Expiratory Pressure in Chronic Obstructive Pulmonary Disease. COPD 2016;13(1):66-74. 7. Suggett J; QoL responder rate analysis; SGRQ vs CAT assessment. COPD 10, 2016 UK. 8. Meyers et al; A lab assessment of different OPEP device. CHEST 2017. 9. J. Suggett et al; A retrospective cohort study comparing 2 OPEP devices in patients with COPD. ATS 2020. 10. Harkness H. et al; Survey of Patients Using an OPEP device. Canadian respiratory conf. 2015.



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Scan to watch  
how to use  
and how to clean