

# Empowering Recovery

It's time to break the COPD exacerbation cycle.



**Aerobika** 

**77%** of COPD patients have experienced an exacerbation, increasing risk of hospitalization and driving disease progression.<sup>1</sup>

029 10:55:17

DAYS HOURS MINS SECS



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

It is estimated that **6.5 million** people globally have moderate to severe COPD.<sup>2</sup>

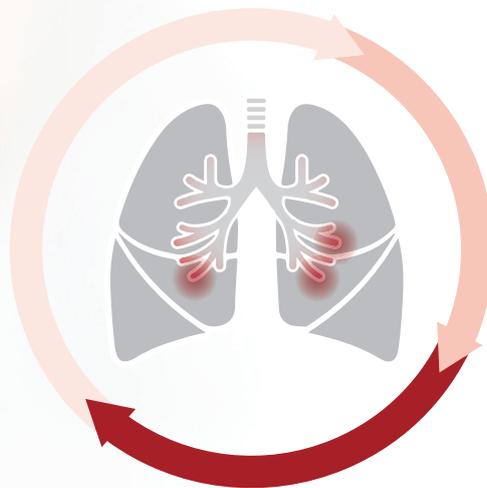
These patients are prone to exacerbations<sup>3</sup>, having 1 to 2 exacerbations per year.<sup>4</sup>

Acute exacerbations are the **most common reason** for medical visits, hospital admissions, and death in patients with COPD.<sup>5</sup>

1 in 5 patients hospitalized for a COPD exacerbation require re-hospitalization **within 30 days**.<sup>6</sup>

## Post-exacerbation airways in crisis: **30 days** – the critical post-exacerbation period.

**During an exacerbation**, airways are compromised by inflammation, mucus buildup, and dynamic lung hyperinflation<sup>7</sup>



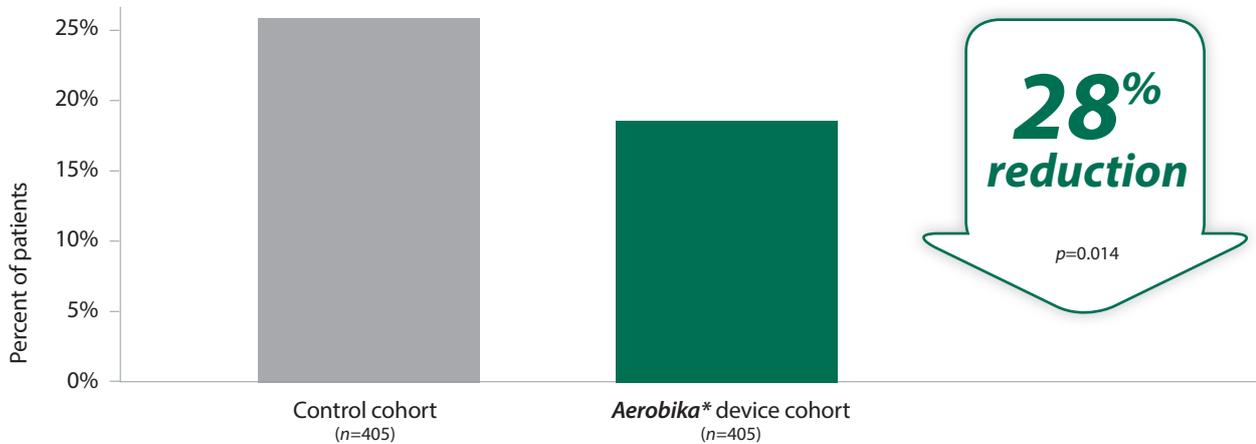
**After an exacerbation**, these factors disrupt the mechanics of ventilation and normal lung function, leading to prolonged respiratory impairment<sup>7</sup>

**Delaying recovery beyond 30 days** places patients at risk for further airway deterioration and recurrent exacerbations<sup>6</sup>

## Post-exacerbation recovery.

According to the GOLD Guidelines, the goal for treatment of COPD exacerbations is to **minimize the negative impact** of the current exacerbation and to **prevent subsequent events**.<sup>8</sup>

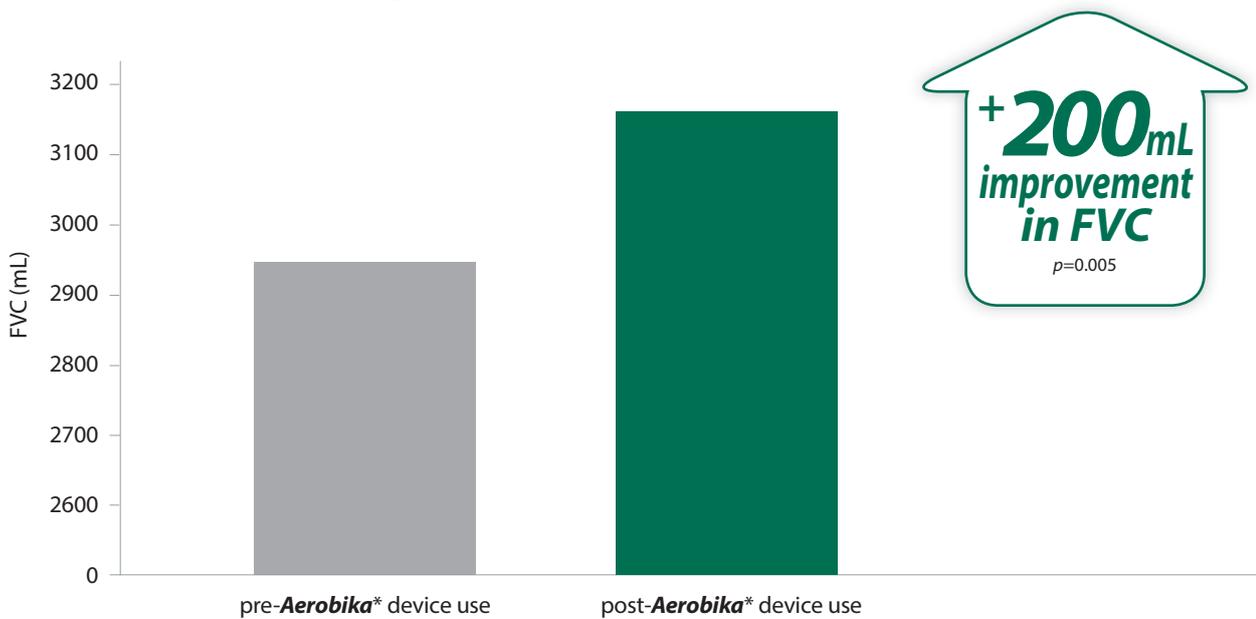
## Reduces COPD exacerbations by 28% in the critical 30 day period<sup>9</sup>



Results from the same real-world study indicated:

- Lower oral corticosteroid and antibiotic use at 30 days following an exacerbation event ( $p \leq 0.0001$  for both)
- A trend towards decreased length of hospital stay (2.2 days)  $p > 0.05$

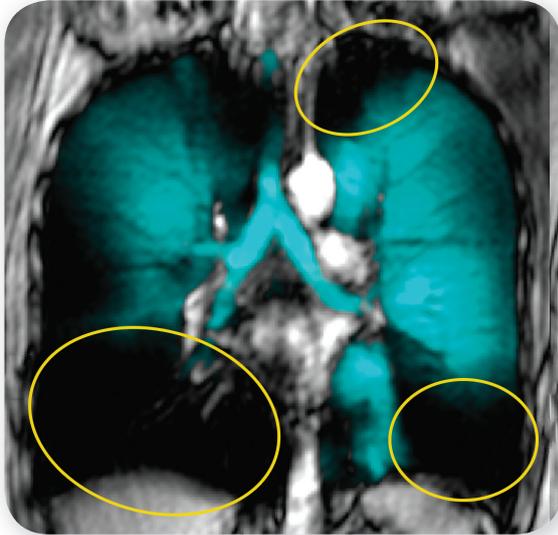
## Improves lung function in COPD<sup>10</sup>



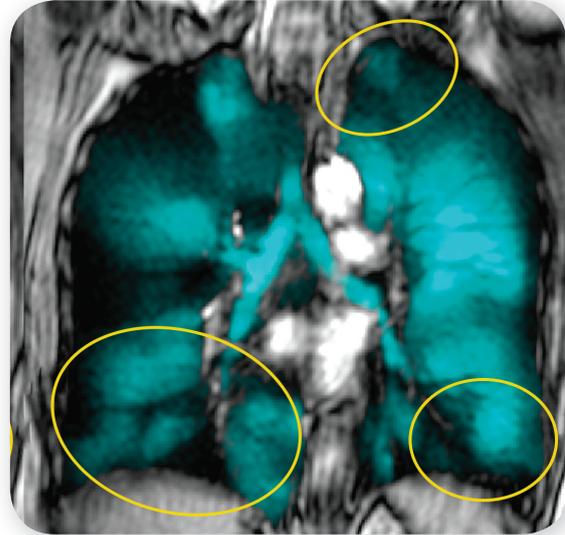
FVC=Forced Vital Capacity

## Improves ventilation in COPD<sup>10</sup>

Before  
Baseline care



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



Hyperpolarized <sup>3</sup>He magnetic resonance imaging (MRI)

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

## An effective addition to COPD disease management

# NNT=17

The **Aerobika**\* device can help prevent 1 hospitalization within 30 days for every 17 patients treated derived from 9

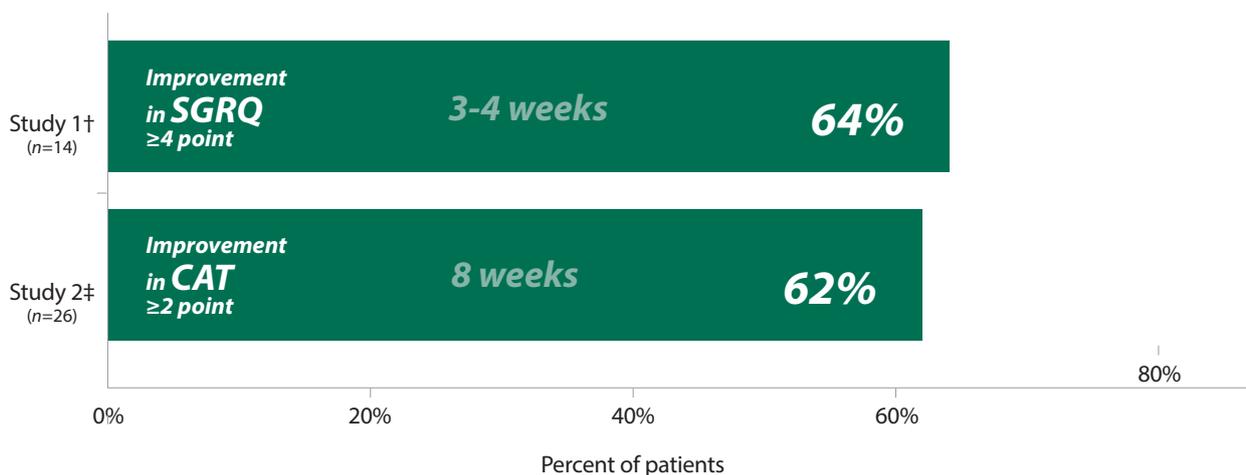
NNT=Number Needed to Treat

Evidence supports the **Aerobika**\* device as an add-on to usual care to manage COPD patients post-exacerbation

## REDUCES HOSPITALIZATIONS

## Improves quality of life in COPD<sup>11</sup>

Responder rates for improvements greater than the Minimum Clinically Important Difference<sup>11</sup>



SGRQ=St. George's Respiratory Questionnaire; CAT=COPD Assessment Test

† Randomized, cross-over study evaluating the efficacy of the **Aerobika**\* device after 3-4 weeks of treatment in patients with COPD and chronic bronchitis.

‡ Clinical assessment of patients with COPD and chronic bronchitis over 8 weeks of treatment with the **Aerobika**\* device.

## The **Aerobika**\* device. Therapeutic Guide

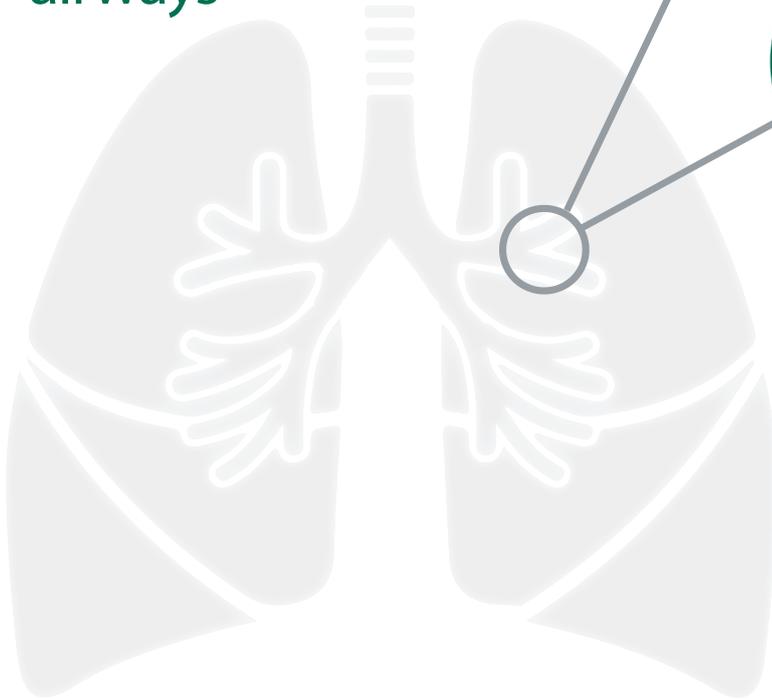
### Post-exacerbation therapy

For the critical 30 days after an exacerbation –  
Administer for 10 minutes, twice daily.

### Long-term control

For ongoing airway maintenance –  
Continue to administer at least once a day.

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



**BEFORE USE**

Airways are inflamed, collapsed and plugged with mucus<sup>7</sup>

**AFTER USE**

Airways are opened

Vibrations help thin and loosen mucus

Inhaled medication may work better<sup>12,13,14</sup>

The **Aerobika<sup>®</sup>** device is drug-free and easy to use

- **Oscillations** are maintained from the start to the end of each breath
- **Resistance settings** adjust to each patient's capacity
- **Operation independent** from orientation
- **Easy to clean** and **disinfect**



**In a patient satisfaction survey,  
97% of respondents said they would  
continue to use the Aerobika<sup>®</sup> device.<sup>15†</sup>**

- **Drug-free**, handheld device designed to address the structural and functional challenges in the airways of patients with COPD
- **Clinically proven** to reduce exacerbations and increase lung function<sup>9,10</sup>
- **Improves** patient quality of life<sup>11</sup>



†Patient satisfaction survey given to 812 patients after ≥3 weeks of twice-daily use of the Aerobika<sup>®</sup> device.

**Prescribe the Aerobika<sup>®</sup> device for post-exacerbation recovery.**

References: 1. Barnes N, et al. BMC Pulm Med 2013;13(54):1-11. 2. World Health Organization. Available from: [www.who.int/respiratory/copd/burden/en/](http://www.who.int/respiratory/copd/burden/en/) (Last accessed 16 July 2018). 3. Seemungal TA, et al. Am J Respir Crit Care Med 1998;157:1418-1422. 4. MacNee W, et al. Thorax 2003;58:261-265. 5. Lawati NA, et al. BCMJ 2008;50(3):138-142. 6. Shah T, et al. CHEST 2016;150(4):916-926. 7. O'Donnell DE, Parker CM. Thorax 2006;61:354-361. 8. Global strategy for the diagnosis, management and prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2018. Available from: [http://goldcopd.org/wp-content/uploads/2017/11/GOLD-2018-v6.0-FINAL-revised-20-Nov\\_WMS.pdf](http://goldcopd.org/wp-content/uploads/2017/11/GOLD-2018-v6.0-FINAL-revised-20-Nov_WMS.pdf) (Last accessed June 2018). 9. Burudpakdee C, et al. Pulm Ther 2017;3(1):163-171. 10. Svenningsen S, et al. J COPD 2016;13(1):66-74. 11. Stockley RA. Abstract presentations: COPD10, Birmingham, United Kingdom, 2016. Chronic Obstr Pulm Dis. 2017; 4(3): 225-246. 12. Wolkove N, et al. CHEST 2002;121(3):702-707. 13. Suggett J, et al. Abstract presented at: COPD11. June 20-21, 2018. Birmingham, United Kingdom. 14. Mussche C, et al. Poster presented at: American Thoracic Society Annual Conference. May 18-23, 2018. San Diego, United States. 15. Harkness H, et al. Poster presented at: Canadian Respiratory Conference. April 23-25, 2015. Ottawa, Canada.



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