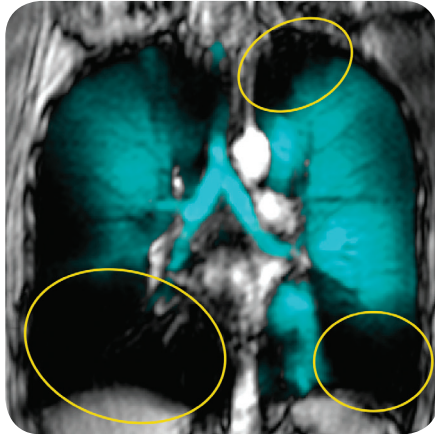


# **Aerobika\*** device is clinically proven to reduce COPD exacerbations.

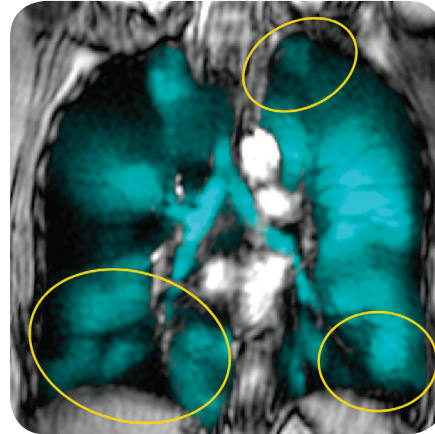
## BEFORE

Baseline care



## 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.<sup>1</sup>



## It's time to break the exacerbation cycle.

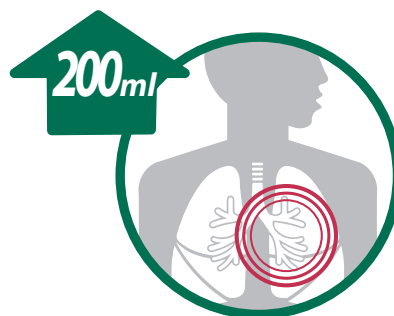
### RM399.00 Only



SCAN ME



reduction in COPD exacerbations at 30 days<sup>2</sup>



improvement in lung function<sup>3</sup>








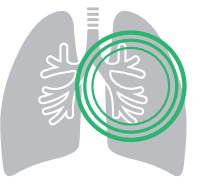
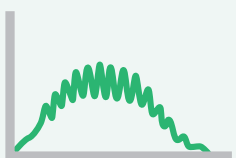
improvement in Quality of Life<sup>4</sup>



Trudell Medical International\*



# Clinical Reference Sheet

	OUTCOME	SUMMARY
CLINICAL BENEFITS	<p><b>Aerobika*</b> device provided improvements in lung function, quality of life and ventilation in COPD patients.</p> 	<p>Evaluated OPEP use in COPD sputum-producers.</p> <p>Significant improvements shown in forced vital capacity (FVC), ease-in-bringing-up-sputum, St. George Respiratory Questionnaire (SGRQ), and 6 minute walk distance (6MWD).</p> <p>Increases in gas distribution demonstrated by hyperpolarized <sup>3</sup>He magnetic resonance imaging (MRI).</p> <p><small>Oscillatory Positive Expiratory Pressure in Chronic Obstructive Pulmonary Disease. Svenningsen S, et al. Journal of COPD 2016;13(1):66-74.</small></p>
	<p>Fewer exacerbations within 30 days of <b>Aerobika*</b> device therapy initiation in COPD patients.</p> 	<p>Real-world retrospective cohort study of COPD patients evaluated OPEP use in crucial 30-day post-exacerbation period.</p> <p>Results include 28% reduction in the frequency of moderate to severe exacerbations (<math>p=0.014</math>), 100% reduction in use of oral corticosteroids (<math>p&lt;0.0001</math>), and 67% reduction in use of antibiotics (<math>p&lt;0.0001</math>).</p> <p><small>A Real-World Study of 30-Day Exacerbation Outcomes in Chronic Obstructive Pulmonary Disease (COPD) Patients Managed with <b>Aerobika*</b> OPEP. Burudpakdee C, et al. Pulmonary Therapy 2017;3(1):163-171.</small></p>
	<p><b>Aerobika*</b> device is a cost-effective addition to COPD disease management.</p> 	<p>Model evaluated the cost-effectiveness of the <b>Aerobika*</b> device versus standard of care (no OPEP/PEP therapy) among post-exacerbation COPD patients.</p> <p>Findings include significant reductions in the number of patients requiring hospitalization and significant reductions in overall direct medical costs per patient.</p> <p>Use of the <b>Aerobika*</b> device after an exacerbation is more effective and less costly compared to standard of care.</p> <p><small>Cost-Effectiveness of the <b>Aerobika*</b> Oscillating Positive Expiratory Pressure Device in the Management of COPD Exacerbations. Khoudjian-Sinani S, et al. International Journal of COPD 2017;12:3065-3073.</small></p>
	<p>Use of the <b>Aerobika*</b> device significantly improves quality of life in COPD.</p> 	<p>Evaluation of the impact of <b>Aerobika*</b> device use on Quality of Life in patients with COPD and chronic bronchitis.</p> <p>Responder rate analysis for improvements greater than the Minimum Clinically Important Difference (MCID) showed 64% improvement in SGRQ (MCID<math>\geq 4</math>) and 62% improvement in COPD Assessment Test (CAT) (MCID<math>\geq 2</math>).</p> <p><small>Quality of Life (QOL) Responder Rate Analysis Following Use of an Oscillating Positive Expiratory Pressure (OPEP) Device for Chronic Obstructive Pulmonary Disease (COPD): SGRQ/CAT Assessments. Stockley RA. COPD10: Birmingham, United Kingdom, July 2016. Chronic Obstr Pulm Dis. 2017;4(3):225-246. Published 2017 Jul 15. doi:10.15326/jcopdf.4.3.2017.0137.</small></p>
	<p>Survey responses demonstrate a high degree of patient satisfaction with the <b>Aerobika*</b> device.</p> 	<p>812 survey responses were collected. 90% of patients had COPD, 8% had bronchiectasis, 2% had cystic fibrosis.</p> <p>Compliance to therapy was high with 97% indicating they would continue to use the device. Patient satisfaction was 94% for the device overall, with 96% finding it easy to use.</p> <p><small>Survey of Patients Using an Oscillating Positive Expiratory Pressure Device Indicates Improvement in Well-Being and Compliance to Therapy. Harkness H, et al. Presented at CRC 2015.</small></p>
	<p><b>Aerobika*</b> device enables airflow redistribution and influences drug deposition patterns.</p> 	<p>Functional respiratory imaging (FRI) evaluated change in airflow correlating with a change in drug deposition after <math>15 \pm 3</math> days use of the <b>Aerobika*</b> device by 10 COPD patients.</p> <p>When the airflow was redistributed towards the lower lobes there was an increase in FEV<sub>1</sub> (forced expiratory volume in one second) values.</p> <p><small>The Use of Functional Respiratory Imaging to Investigate the Impact of an Oscillating Positive Expiratory Pressure Device on Lung Dynamics and Drug Deposition. Kushnarev V, et al. Presented at ERS 2018.</small></p>
FUNCTIONAL	<p>OPEP devices are not the same.</p> 	<p>Investigation assessed the waveforms of OPEP devices and linked pressure pulse amplitude and frequency in order to compare potential effectiveness.</p> <p>TPPI<sub>f</sub> values showed the <b>Aerobika*</b> device to be the most effective. Oscillations were high and consistent during each exhalation and covered frequency that support cilia movement.</p> <p><small>Suggett JA, et al. Assessing the Waveforms Of Different Oscillating Positive Expiratory Pressure Devices: A Clinically Relevant Pressure Pulse Laboratory Study. Pediatric Pulmonology 2018;53(S2):343.</small></p>

For a comprehensive overview of published studies refer to the **Aerobika\*** device Study Summary.

1 Svenningsen S, et al. J COPD 2016;13(1):66-74. 2 Burudpakdee C, et al. Pulm Ther 2017;3(1):163-171. 3 Adapted from Svenningsen S, et al. J COPD 2016;13(1):66-74. 4 Stockley RA. Abstract presentations: COPD10, Birmingham, United Kingdom, 2016. Chronic Obstr Pulm Dis. 2017; 4(3): 225-246.

COPD=Chronic Obstructive Pulmonary Disease

TPPI<sub>f</sub>=Total Pressure Pulse Impact around optimum oscillation frequency

110154-003 Rev B. \* trade marks and registered trade marks of Trudell Medical International (TMI). © TMI 2019. All rights reserved.