

# THE IMPACT OF COPD EXACERBATIONS GOES BEYOND THE LUNGS

Protect your patients  
by preventing  
exacerbations today.





# ONE EXACERBATION IS ONE TOO MANY

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## FUTURE HOSPITALIZATION

**21%**  
increase in  
being hospitalized  
after one moderate  
exacerbation<sup>1</sup>

## INCREASED CV EVENTS

**2X**  
increase in the  
risk of myocardial  
infarction within  
5 days of one  
moderate  
exacerbation<sup>2</sup>

## EARLY DEATH

Up to  
**50%**  
of COPD patients  
will die within  
3.6 years of one  
severe exacerbation<sup>3</sup>

FUTURE RISK

RISK OF CV EVENT

EXACERBATION FREQUENCY

EXACERBATION DEFINITION

SUMMARY



# EXACERBATIONS DRAMATICALLY INCREASE THE RISK OF A **SUBSEQUENT CV EVENT**

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## **FIRST 10 DAYS**

**40% increase** in the risk of stroke  
within 6-10 days<sup>2</sup>



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## **OVER 1 YEAR**

**4X increase** in the risk of a  
CV event the first 30 days<sup>4\*</sup>

**90% increase** in the risk of a  
CV event from 3 months to 1 year<sup>4\*</sup>



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\* CV events included CV death, myocardial infarction, stroke, unstable angina, and transient ischemic attack. Increased risk was defined as cardiovascular disease or cardiovascular risk factors.



# EXACERBATIONS DRAMATICALLY INCREASE THE RISK OF A **SUBSEQUENT CV EVENT**

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## **AFTER HOSPITALIZATION**

**10X increase** in the risk of a  
CV event after a hospitalization<sup>4\*</sup>



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\* CV events included CV death, myocardial infarction, stroke, unstable angina, and transient ischemic attack. Increased risk was defined as cardiovascular disease or cardiovascular risk factors.



# EXACERBATIONS HAPPEN **MORE FREQUENTLY** THAN YOUR PATIENTS ACKNOWLEDGE

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**50%** of symptomatic patients will experience a COPD exacerbation within the next year<sup>5</sup>

Each exacerbation has devastating effects on mental and emotional well-being<sup>5</sup>



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**~70%** of exacerbations are not reported by patients with COPD despite their significant impact<sup>6</sup>



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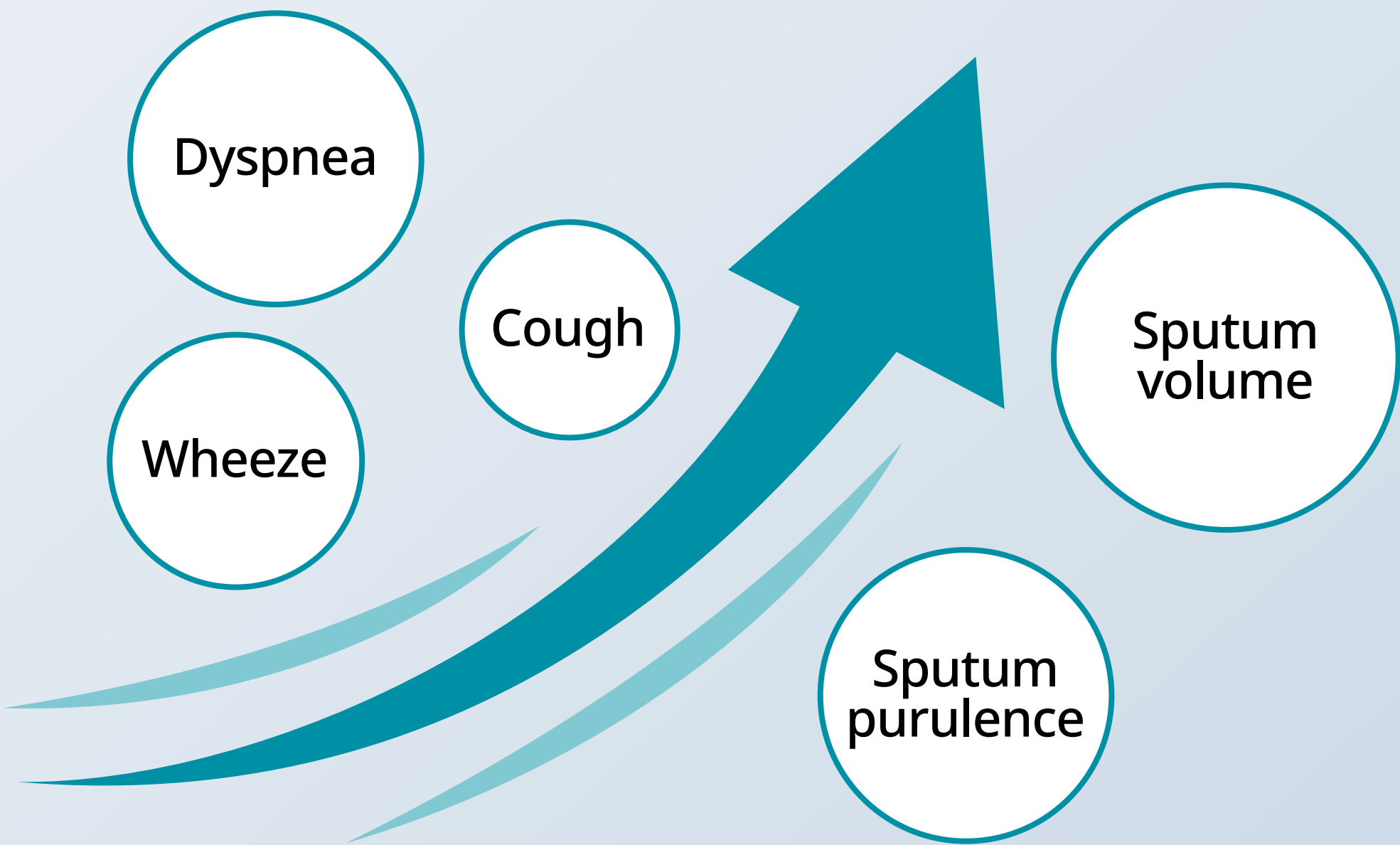
SUMMARY

# COPD EXACERBATION: DEFINITION AND CLASSIFICATION



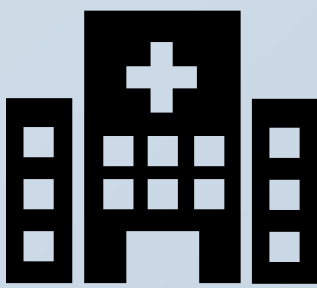
The CTS guidelines define a COPD exacerbation as an acute worsening of respiratory symptoms that may require the use of antibiotics and/or systemic corticosteroids and/or healthcare services.<sup>7</sup>

## Worsening of symptoms<sup>8</sup>

Symptoms can last between 7 and 10 days, but some events may last longer



## Exacerbation classification<sup>7</sup>

-  **Mild**  
Worsening or new respiratory symptoms without a change in prescribed medications
-  **Moderate**  
Prescription of an antibiotic and/or oral corticosteroids
-  **Severe**  
Requires hospitalization or ED visit



# A SINGLE EXACERBATION CAN HAVE FAR-REACHING EFFECTS THAT GO BEYOND THE LUNGS<sup>1-4</sup>



**Future  
exacerbations**



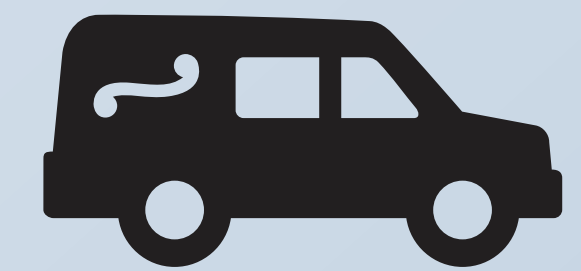
**Poor quality  
of life**



**Future  
hospitalization**



**CV events**



**Death**

**Proactively optimize treatment in your patients with COPD**

1. Rothnie KJ, *et al. Am J Respir Crit Care Med.* 2018;198:464–471. 2. Donaldson GC, *et al. Chest.* 2010;137:1091–1097. 3. Suissa S, *et al. Thorax.* 2012;67:957–963. 4. Kunisaki KM, *et al. Am J Respir Crit Care Med.* 2018;198(1):51–57. 5. Müllerová H, *et al. BMJ Open.* 2014;4(12):e006171. 6. Langsetmo L, *et al. Am J Respir Crit Care Med.* 2008;177:396–401. 7. Global Initiative for Chronic Obstructive Lung Disease. 2022 Report. Available at: <https://goldcopd.org/2022-gold-reports-2/>. 8. Bourbeau J, *et al. Canadian Thoracic Society Clinical Practice Guideline on pharmacotherapy in patients with COPD – 2019 update of evidence.* Available at: [https://cts-sct.ca/wp-content/uploads/2019/10/CTS-COPD-Rx-2019-Guideline\\_Final.pdf](https://cts-sct.ca/wp-content/uploads/2019/10/CTS-COPD-Rx-2019-Guideline_Final.pdf).

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**SUMMARY**