

# Significant burden of chronic obstructive pulmonary disease (COPD) on health status and well-being persists among patients experiencing one severe or two or more moderate exacerbations of COPD and their caregivers

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## Rationale

- Despite optimal maintenance pharmacotherapy (including long-acting bronchodilators with or without inhaled corticosteroids), a significant proportion of patients with COPD continue to suffer from exacerbations<sup>1,2</sup>
- Moderate or severe exacerbations are associated with morbidity, mortality, healthcare costs and reduction in quality of life, and therefore pose a substantial burden to patients<sup>2-5</sup>
- Many patients with COPD rely on informal caregivers who take on a wide range of responsibilities and are themselves significantly burdened<sup>6</sup>
- This study aimed to evaluate the burden of COPD on patients with a history of exacerbations and their informal caregivers

## Methods

- This cross-sectional study included patients with COPD (n = 155) and their informal caregivers (n = 152) from Canada, Italy and the UK. Data were collected from December 2024 to May 2025

Key patient eligibility criteria	Key caregiver eligibility criteria
Aged ≥40 years with confirmed COPD diagnosis	Aged ≥18 years
Experienced ≥2 moderate (treated in outpatient setting) and/or ≥1 severe (treated in inpatient setting) COPD exacerbation(s) in the previous 12 months	Informal primary caregiver
Receiving ≥1 inhaled maintenance therapy (e.g. LABA, LAMA, ICS or a combination thereof)	Provided ≥6 months of continuous support
FEV <sub>1</sub> ≥20% to <80%	
No other significant pulmonary disease	Must not be a professional caregiver employed for the patient
No lung volume reduction surgery in the last 12 months	
No past or future lung transplant surgery	

- Data were collected via electronic health records and patient/caregiver surveys and are summarised descriptively

Patient-reported outcome instruments	Caregiver-reported outcome instruments
EQ-5D-5L + respiratory bolt-on	EQ-5D-5L
EQ-HWB	EQ-HWB
CAAT	ZBI-12
WPAI:COPD v2.0	WPAI:CG

CAAT, Chronic Airways Assessment Test; COPD, chronic obstructive pulmonary disease; EQ-HWB, EQ Health and Wellbeing; FEV<sub>1</sub>, forced expiratory volume in 1 second; ICS, inhaled corticosteroid; LABA, long-acting beta-agonist; LAMA, long-acting muscarinic antagonist; WPAI:CG, Work Productivity and Activity Impairment questionnaire adapted for caregiving; WPAI:COPD, Work Productivity and Activity Impairment questionnaire; COPD; ZBI-12, short form Zarit Burden Interview.

## References

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## Disclosures

Data within the poster are directly derived from research sponsored by Genentech, Inc., a member of the Roche Group. Denise M Boudreau is a Genentech employee with possible stock options. Per-Olof Thuresson is an employee of and has shares in F. Hoffmann-La Roche.



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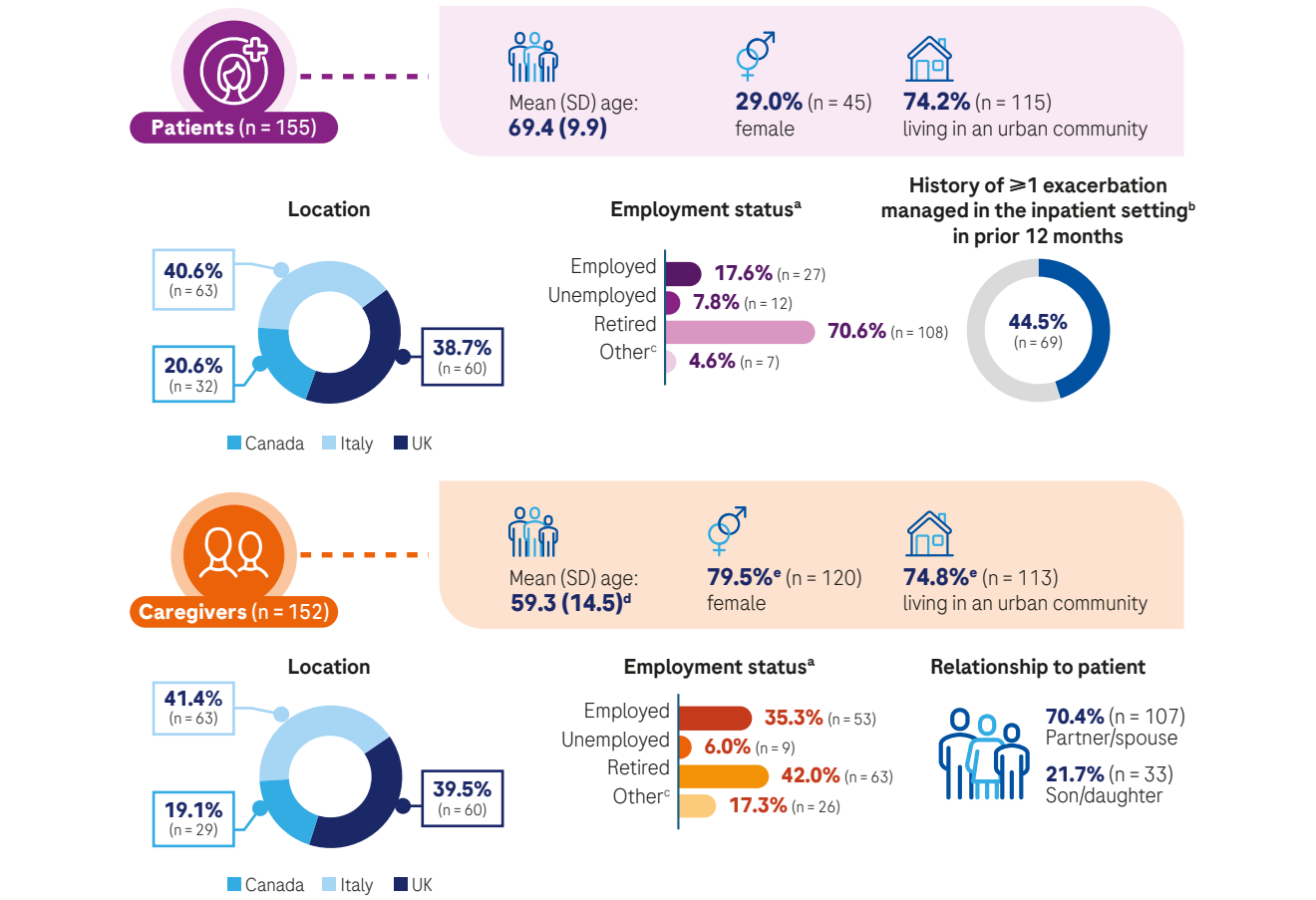
Prepared for the ISPOR Europe 2025 Meeting; 9-12 November 2025; Glasgow, Scotland, UK  
This poster was sponsored by Genentech Inc., a member of the Roche Group. Third-party writing assistance was furnished by CMC Connect, a division of IPG Health Medical Communications

Results from this cross-sectional study highlight the burden of COPD experienced by patients with a 1-year history of ≥1 severe (treated in inpatient settings) exacerbation and/or ≥2 moderate (treated in outpatient settings) exacerbations and their informal caregivers. This burden spans health-related quality of life, physical and emotional well-being, caregiving responsibilities and work productivity impairment

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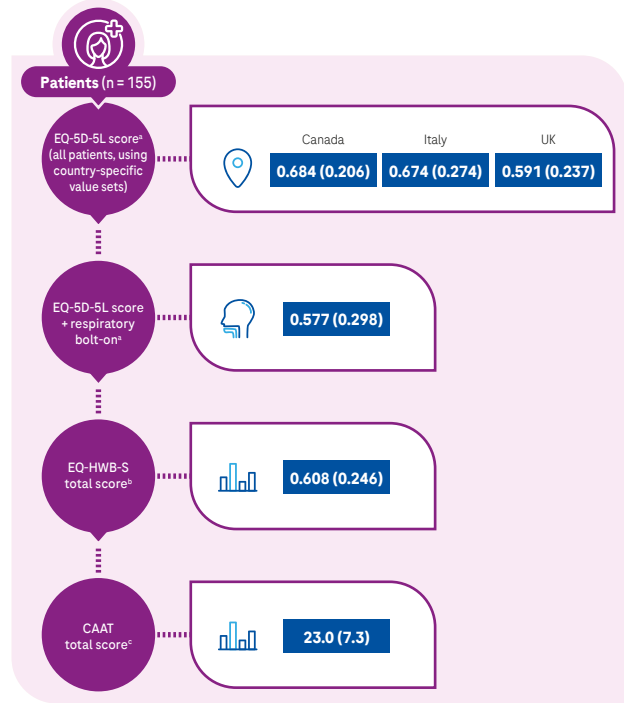
## Results

Patient and caregiver baseline characteristics and demographics



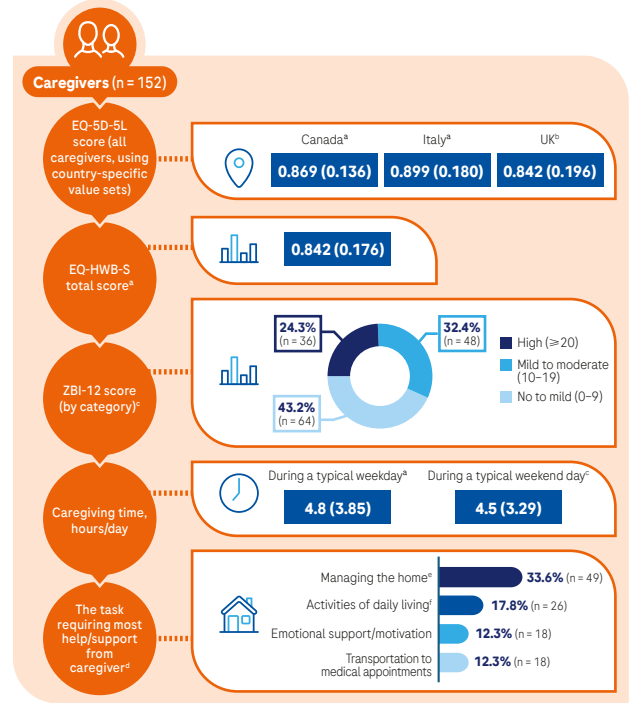
<sup>a</sup>Patients, n = 153; caregivers, n = 150; <sup>b</sup>Emergency department or hospitalisation; <sup>c</sup>Other includes full-time homemaker, student, on sick leave, other and prefer not to say; <sup>d</sup>n = 149; <sup>e</sup>n = 151. SD, standard deviation.

## Patient-reported outcomes: HRQoL, symptomatic and humanistic burden



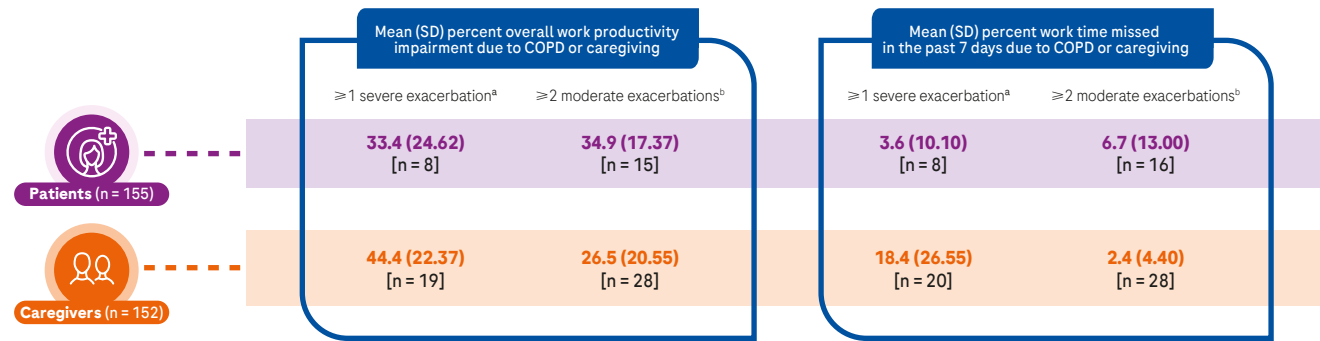
Data are mean (SD).  
<sup>a</sup>n = 152; <sup>b</sup>n = 151; <sup>c</sup>n = 154.  
CAAT, Chronic Airways Assessment Test; EQ-HWB-S, EQ Health and Wellbeing Short form; HRQoL, health-related quality of life; SD, standard deviation.

## Caregiver-reported outcomes: HRQoL, symptomatic and humanistic burden and caregiving activities



Data are mean (SD) or percent.  
<sup>a</sup>n = 149; <sup>b</sup>n = 145; <sup>c</sup>n = 148; <sup>d</sup>n = 146; <sup>e</sup>e.g. housekeeping, chores, using appliances; <sup>f</sup>e.g. bathing/showering, dressing.  
EQ-HWB-S, EQ Health and Wellbeing Short form; HRQoL, health-related quality of life; SD, standard deviation; ZBI-12, short form Zarit Burden Interview.

## Patient- and caregiver-reported outcomes: work productivity impairment measured by WPAI:COPD and WPAI:CG



Out of those employed; 0% = no impairment, 100% = complete impairment.  
<sup>a</sup>Severe exacerbations treated in inpatient settings; <sup>b</sup>Moderate exacerbations treated in outpatient settings.  
COPD, chronic obstructive pulmonary disease; SD, standard deviation; WPAI:CG, Work Productivity and Activity Impairment questionnaire adapted for caregiving; WPAI:COPD, Work Productivity and Activity Impairment questionnaire; COPD.

## Conclusions

- The results of this study highlight the burden that COPD imposes on patients with a history of exacerbations and their informal caregivers
- The study highlighted measures underreported in the literature affecting health-related quality of life, physical and emotional well-being and work productivity impairment