Assessment of COPD Severity in the UK CPRD
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DISCLOSURES
Estel Plana, Cristina Rebordosa, Jaume Aguado, Steven Thomas, Susana Perez-Gutthann, and Jordi Castellsague are full-time employees of RTI Health Solutions, which received funding from AstraZeneca to conduct this study. The content of this paper was prepared by RTI Health Solutions and the sponsor is independent of the content. RTI Health Solutions works for government, public, and private organizations, including pharmaceutical companies. As an RTI-HS employee, Susana Perez-Gutthann has also participated in scientific advisory boards that are funded by pharmaceutical companies. Esther Garcia Gil is an employee of AstraZeneca, Barcelona, Spain.

BACKGROUND
- Severity of chronic pulmonary obstructive disease (COPD) is an important predictor of COPD outcomes and mortality.
- COPD exacerbations are the primary cause of COPD-related hospitalizations and healthcare costs worldwide (12,13).
- To evaluate the severity of COPD requires different approaches to measure exacerbations, symptoms, and smoking status (14).
- Many of the symptoms used to assess severity match the characteristics of the GOLD 2016 definition of COPD (15).

OBJECTIVES
- To assess the severity of COPD using the GOLD 2016 classification and an adapted algorithm from Verhamme et al. (2).
- To compare the severity of COPD using the GOLD 2016 classification and the adapted algorithm from Verhamme et al. (2) with the algorithm from Verhamme et al. (3).

METHODS
- Cohort study of new users of inhaled and other COPD medications between 2012 and 2015, aged 40 years and older with COPD.
- Severity was classified using the GOLD 2016 severity categories (3) at the time of starting a study drug (start date).
- Severity was also classified using an adaptation of the algorithm proposed by Verhamme et al. (2).

RESULTS
- The study included 63,900 new users of COPD medications aged ≥ 40 years with COPD.
- The percent predicted FEV1 was 78.2% and the expected FEV1 was 80.7% (Table 1). The kappa statistic, measuring the degree of agreement between the estimated and the r

REFERENCES

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Figure 1. Model of Symptoms/Risk of Evaluation for Severity of COPD

Figure 2. Percentage of Patients With Available Data on Spirometry Values

Figure 3. Agreement Between Estimated and Recorded Percent Predicted FEV1 Values

Figure 4. Percentage of Patients With Available Data on Symptoms in the 12 Months Before Start Date

Figure 5. Percentage of Patients Classified Into Each Category of COPD Severity Using the Verhamme et al. Adapted Algorithm and GOLD 2016 Definition (N = 48,285)