Does "PRISm Grade" Really Make Sense?

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To the Editor:

We recently read the editorial by Casaburi and Crapo, "Should the Term 'PRISm' Be Restricted to Use in Evaluating Smokers?" which was recently published in the *Journal* and which mentioned a point about assessing the severity of preserved ratio inspired spirometry (PRISm) (1). The authors proposed to subdivide PRISm into subgroups PRISm2, PRISm3, and PRISm4, with a separation at 30% and 50% of predicted FEV_1, in parallel with the subdivision into Global Initiative for Chronic Obstructive Lung Disease (GOLD) Stage 2, GOLD 3 and GOLD 4 chronic obstructive pulmonary disease (COPD) classifications. This proposal is interesting, and we need to think and worry about it more.

The mean predicted FEV_1 of PRISm was found to be between 70% and 75%. The number of PRISm3 and PRISm4 subgroups (with a predicted FEV_1 below 50%) was low, and too few individuals had low FEV_1 in combination with the normal value of the ratio of FEV_1 to FVC (FEV_1/FVC). If the FEV_1/FVC remains normal but predicted FEV_1 decreases, the FVC value also decreases. Meanwhile, low FEV_1, low FVC, and normal FEV_1/FVC mean a high probability of having a restrictive spirometry pattern, and patients usually suffered from congenital or severe lung disease (2).

Nowadays, PRISm has not been included as a clinical diagnosis and is usually regarded as a "preclinical" status of COPD. However, as mentioned earlier, if the predicted FEV_1 value decreases but the FEV_1/FVC remains normal, patients may have undiagnosed lung disease, but not COPD, which should be diagnosed after other lung diseases have been excluded. Then, it is not appropriate to consider PRISm3 or PRISm4 as a preclinical status of COPD, although estimates have shown that about 12.2–25.1% of individuals with PRISm will develop COPD in the future (3, 4). The development of PRISm3 and PRISm4 needs to be pursued; further studies will confirm this.

In recent years, many studies have focused on the association between PRISm and other diseases such as diabetes and cardiovascular disease, as well as mortality (5). If we consider PRISm as an isolated spirometry status and without linking to COPD, the PRISm severity subgroups could provide more information about the development of other diseases and mortality. Similarly, GOLD 2024 mentioned that "Not all individuals with pre-COPD or PRISm will eventually develop fixed airflow obstruction over time (and hence COPD) but they should be considered 'patients' (because they already suffer symptoms and/or have functional and/or structural abnormalities) and, as such, they deserve care and treatment" (6). However, the management, care, and treatment of PRISm are deficient and require more in-depth study.

In conclusion, PRISm can be treated as an isolated status, and severity subgroups can be established to assess the risk of development and mortality of other diseases, except COPD. ■

Author disclosures are available with the text of this letter at www.atsjournals.org.

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