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RESPONSE TO LETTER

# Using Tools as Designed [Response to Letter]

Jiawei Zhou, Wei Wang

Department of Respiratory and Critical Care Medicine, the First Hospital of China Medical University, Shenyang, 110000, People's Republic of China

Correspondence: Wei Wang, Email wwbycmu@126.com

## Dear editor

We appreciate Drs Han, Make and Yawn for reading our study and supporting our view that different COPD screening questionnaires have different sensitivity, specificity, and AUC in different populations. CAPTURE is a five-item question and peak flow values.[1] However, the purpose of our study was to compare the accuracy of different screening questionnaires in the same population and find a screening questionnaire with acceptable accuracy to improve early diagnosis and treatment of COPD for Chinese. Therefore, we used only the questionnaire part of the CAPTURE.

On the one hand, according to a nationally cross-sectional study in 2014, the overall prevalence of spirometry-defined COPD in China was 8.6% in people aged over 20 years, accounting for 99.9 million people.[2] So enormous patients that the screening workload and the expenditure on human and medical resources will be huge. On the other hand, primary care institutions such as community health service centers and secondary hospitals often serve as prominent institutions for diagnosing COPD for the first time in China.[3] However, due to the differences in regional medical environments, even peak flow meters are difficult to be widely equipped and used in primary care institutions. In addition, patients also need guidance in using peak flow meters. The United States Preventive Services Task Force (USPSTF) recommended that screening questionnaires can be used to identify high-risk groups for additional pulmonary function testing,[4] which are more accessible than peak flow meters. As previously mentioned in the introduction of our article, screening questionnaires can assist primary care physicians in the early identification of high-risk patients and serve as a health self-examination tool for the population.[5] Therefore, considering our national conditions, we used only the questionnaire portion of CAPTURE as a screening tool. Our study has shown that the questionnaire portion of CAPTURE has a certain degree of screening accuracy and could be used for first-level COPD screening. In addition, we acknowledged that owing to the absence of peak flow values, the sensitivity of CAPTURE was inevitably overestimated, and the specificity of CAPTURE was underestimated, which should be listed as one of our limitations.

Thanks to Drs Han, Make and Yawn for their suggestions, we will explore the screening accuracy of CAPTURE-combination of five questions with peak flow values in Chinese in future studies. We sincerely hope that the CAPTURE will play an essential role in the early diagnosis and treatment of COPD.

## Disclosure

The authors reports no conflicts of interest in this communication.

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