are needed to better assess the impact of OSA on cognition in subjects with COPD. Thus, further longitudinal studies in larger samples are needed to better assess the impact of OSA on cognition in COPD.

Nevertheless, as mentioned by Dr Damiani and colleagues, the coexistence of OSA and COPD (overlap syndrome)\(^4\)\(^5\) may cause more severe cognitive impairment, increasing the risk of cognitive decline in this subgroup of patients. This would have important implications for the clinical support and follow-up of patients with COPD. Thus, further longitudinal studies in larger samples are needed to better assess the impact of OSA on cognition in COPD.

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**Antithrombotic and Thrombolytic Therapy for Valvular Disease**

**Can This Guideline Apply to Chinese?**

To the Editor:

We were pleased to read the article by Whitlock et al\(^1\) in the February 2012 supplement issue of CHEST. They concluded, “In patients with a mechanical mitral valve (both the aortic and mitral position), we suggest [vitamin K antagonist] therapy with a target [international normalized ratio (INR)] of 3.0 (range, 2.5-3.5).”\(^2\) They concluded, when the risk of anticoagulant treatment treatment after mechanical heart valve replacement. A significant trend toward a higher frequency of thromboembolic events was observed in the group of non-Chinese patients in Western countries, while the trend in Chinese patients was a higher frequency of bleeding. Hence, there was always doubt as to whether the guideline was appropriate for Chinese patients. This high-intensity strategy is relatively more effective for races other than Chinese. INR levels between 1.5 and 2.0 are recommended for Chinese patients with anticoagulation treatment after mechanical heart valve replacement.

Second, West China Hospital, in Chengdu, has developed a national, multicenter database (Anticoagulation Therapy Database of Chinese Patients After Heart Valve Replacement, unpublished data, January 2011-December 2012) of patients who have undergone heart valve replacement since 2011. The database is part of the Low-intensity Anticoagulation Study. The database is now one of the largest of its kind in China, with 45 centers from 15 provinces participating in the project. To date, detailed information has been collected from > 8,000 patients. The preliminary research demonstrates that when INR values are between 1.5 and 2.0, the incidence of both thromboembolic and bleeding complications is the lowest.

Patients in the study need rigorous follow-up. We embarked on this study to establish an anticoagulant guideline that is in accordance with the characteristics of Chinese following heart valve replacement, as well as to provide a potential clinical research tool for the future.

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Response

To the Editor:

We thank Drs Fu and colleagues for their letter regarding the applicability of the American College of Chest Physicians guidelines on antithrombotic and thrombolytic therapy for valvular disease to Chinese patients. To clarify, the guidelines on mechanical valves recommend the following:

1. In patients with a mechanical aortic valve, we recommend VKA (vitamin K antagonist) therapy with a target of 2.5 (range, 2.0-3.0) over higher targets (Grade 1B).
2. In patients with a mechanical mitral valve, we suggest VKA therapy with a target of 3.0 (range, 2.5-3.5) over lower international normalized ratio (INR) targets (Grade 2C).
3. In patients with mechanical heart valves in both the aortic and the mitral positions, we suggest target INR 3.0 (range, 2.5-3.5) over target INR 2.5 (range, 2.0-3.0) (Grade 2C).

However, the gist of the letter from West China Hospital is valid. INR targets in Chinese patients, and indeed in all patients, need higher-quality evidence than what currently exists. Differing INR targets based on thromboembolic risk is unique to heart valve therapy; for example, the INR target for a patient with atrial fibrillation and a CHA2DS2VASc stroke risk score of 8 is the same as that of a patient with a CHA2DS2VASc score of 3, despite higher thromboembolic risk. The evidence supporting such differing targets for heart valves is of moderate quality at best according to the GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) framework, and begs for further studies. One such study, Lowering the Intensity of Oral Anticoagulant Therapy in Patients With Bileaflet Mechanical Aortic Valve Replacement (LOWERING-IT), also supports the approach of lower INR targets in low-risk mechanical aortic valves but needs validation in a larger trial. The ninth edition of the American College of Chest Physician guidelines presents an objective assessment of the available literature up to October 2009 that is based on the GRADE framework and the resultant recommendations. We look forward to reading publications from the West China Hospital based on its national database and will incorporate any new knowledge into future guidelines.

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References

The Predictive Value of Interferon-γ Release Assays and Tuberculin Skin Test
What About Those Not Vaccinated With Bacillus Calmette-Guérin?

To the Editor,

In a recent meta-analysis in CHEST (July 2012), Diel et al concluded that interferon-γ release assays (IGRAs), including QuantiFERON-TB Gold (QFT-G) (Cellestis, a company of Qiagen GmBH), QuantiFERON-TB Gold In-Tube (QFT-GIT) (Cellestis, a company of Qiagen GmBH), and the T-SPOT.TB ELISPOT (Oxford Immunotec Ltd), have a higher positive predictive value (PPV) and negative predictive value (NPV) for progression to active TB compared with those of the tuberculin skin test (TST). The PPV and NPV in those not vaccinated with bacille Calmette-Guérin (BCG) was not shown because the majority of the study participants had a history of BCG vaccination. Therefore, the results should apply mostly to the BCG-vaccinated and not be generalized.

A previous study in contacts of patients with TB by the same authors disregarded the analysis in the population at the highest risk of disease, that is, BCG-unvaccinated close contacts exposed to patients who tested positive on smear with pulmonary disease. But further analysis found that the PPVs of QFT-GIT and TST were not statistically different. This indicates that both tests may predict TB disease similarly in this population. This is probably one of the reasons why the use of TST continues in most low-burden settings where the BCG vaccine has been discontinued.

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