

**Pak Hei Chan, MBBS**  
**\*Chung Wah Siu, MD**  
\*Cardiology Division  
Department of Medicine  
The University of Hong Kong  
Hong Kong, China  
E-mail: [cwdsiu@hku.hk](mailto:cwdsiu@hku.hk)  
<http://dx.doi.org/10.1016/j.jacc.2015.03.601>

Please note: The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

#### REFERENCES

1. Olesen JB, Lip GY, Kamper AL, et al. Stroke and bleeding in atrial fibrillation with chronic kidney disease. *N Engl J Med* 2012;367:625-35.
2. Bonde AN, Lip GY, Kamper AL, et al. Net clinical benefit of antithrombotic therapy in patients with atrial fibrillation and chronic kidney disease: a nationwide observational cohort study. *J Am Coll Cardiol* 2014;64:2471-82.
3. Shah M, Avgil Tsadok M, Jackevicius CA, et al. Warfarin use and the risk for stroke and bleeding in patients with atrial fibrillation undergoing dialysis. *Circulation* 2014;129:1196-203.
4. Chan PH, Huang D, Yip PS, et al. Ischemic stroke in patients with atrial fibrillation with chronic kidney disease undergoing peritoneal dialysis. *Europace* 2015. In press.

#### REPLY: Clinical Benefit of Warfarin in Dialysis Patients With Atrial Fibrillation



Drs. Chan and Siu reviewed the data on warfarin for patients with atrial fibrillation (AF) on dialysis. They argued that one of the merits of the study by Shah et al. (1) was the high prevalence of warfarin users and that one of the merits of our study was that we were able to distinguish between patients on hemodialysis and patients on peritoneal dialysis. Unfortunately, consensus on this important subject has not yet been reached, and the prevalence of warfarin usage among patients with AF and severe chronic kidney disease varies among countries and among clinics. In a recent Swedish study of patients with post-myocardial infarction AF (2), only 66 of 478 patients (13.8%) with an estimated glomerular filtration rate of <16 ml/min/1.73 m<sup>2</sup> received warfarin at baseline compared with 46.0% of dialysis patients in the study by Shah et al. (1).

We agree that the net clinical benefit of warfarin may be different in patients with AF on peritoneal dialysis than patients with AF on hemodialysis. Most of the observational studies in this area have focused on warfarin for hemodialysis patients (3,4), and in our study, we only found a significant effect difference of warfarin between peritoneal and hemodialysis patients among patients with low-risk AF (a relatively small group) (5). Because we still do not have data from randomized clinical trials on the benefit of warfarin in patients with AF on dialysis, new data from observational cohorts are welcomed.

**\*Anders N. Bonde, MB**  
**Anne-Lise Kamper, MD, DMSc**  
**Jonas B. Olesen, MD, PhD**  
\*Department of Cardiology  
Copenhagen University Hospital Gentofte  
Niels Andersens Vej 65  
Hellerup, Copenhagen 2900  
Denmark  
E-mail: [anders@nissenbonde.dk](mailto:anders@nissenbonde.dk)  
<http://dx.doi.org/10.1016/j.jacc.2015.05.081>

Please note: Dr. Olesen has received speaker fees from Bristol-Myers Squibb and Boehringer Ingelheim; and funding for research from Bristol-Myers Squibb. Both other authors have reported that they have no relationships relevant to the contents of this paper to disclose.

#### REFERENCES

1. Shah M, Avgil Tsadok M, Jackevicius CA, et al. Warfarin use and the risk for stroke and bleeding in patients with atrial fibrillation undergoing dialysis. *Circulation* 2014;129:1196-203.
2. Carrero JJ, Evans M, Szummer K, et al. Warfarin, kidney dysfunction, and outcomes following acute myocardial infarction in patients with atrial fibrillation. *JAMA* 2014;311:919-28.
3. Chan KE, Lazarus JM, Thadhani R, Hakim RM. Warfarin use associates with increased risk for stroke in hemodialysis patients with atrial fibrillation. *J Am Soc Nephrol* 2009;20:2223-33.
4. Wizemann V, Tong L, Satayathum S, et al. Atrial fibrillation in hemodialysis patients: clinical features and associations with anticoagulant therapy. *Kidney Int* 2010;77:1098-106.
5. Bonde AN, Lip GY, Kamper AL, et al. Net clinical benefit of antithrombotic therapy in patients with atrial fibrillation and chronic kidney disease: a nationwide observational cohort study. *J Am Coll Cardiol* 2014;64:2471-82.