

[ LETTERS TO THE EDITOR ]

**How to Construct Novel Criteria for Predicting Complication with Infectious Endocarditis**

**Key words:** B-type natriuretic peptide, heart failure, hemodynamics

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*To the Editor* Given its associated high mortality, predicting the development of comorbidities, including embolic events, in patients with infective endocarditis has been explored in order to determine the ideal timing of valve surgery. I have read with great interest the manuscript written by Saito et al., validating the utility of the Embolic Risk French Calculator, which consists of several clinical variables and guideline recommendations (history of embolism or maximum vegetation length >10 mm) (1, 2), for predicting embolic events and other unfavorable in-hospital comorbidities among 52 patients with infectious endocarditis (3).

I congratulate the authors on their extensive experience with such a large number of patients with infectious endocarditis. Given their moderate cohort size and findings of several promising predictors of embolic events, I suggest they create their own novel criteria for predicting embolic events by modifying the Embolic Risk French Calculator. They found that several variables, including hypertension, multivalvular/prosthetic valve infection, and higher B-type natriuretic peptide, were significant predictors of embolic events. Considering their hazard ratio, novel criteria might

be able to be constructed. Furthermore, although a maximum vegetation length >10 mm was not a significant predictor of embolic events in their study, the optimal cut-off may be calculated by a receiver operating characteristics analysis. The maximum vegetation length dichotomized by the calculated cut-off may then also be incorporated in the novel criteria that predict future embolic events better than the original French Calculator.

**The author states that he has no Conflict of Interest (COI).**

Teruhiko Imamura

**References**

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