

Supplementary material

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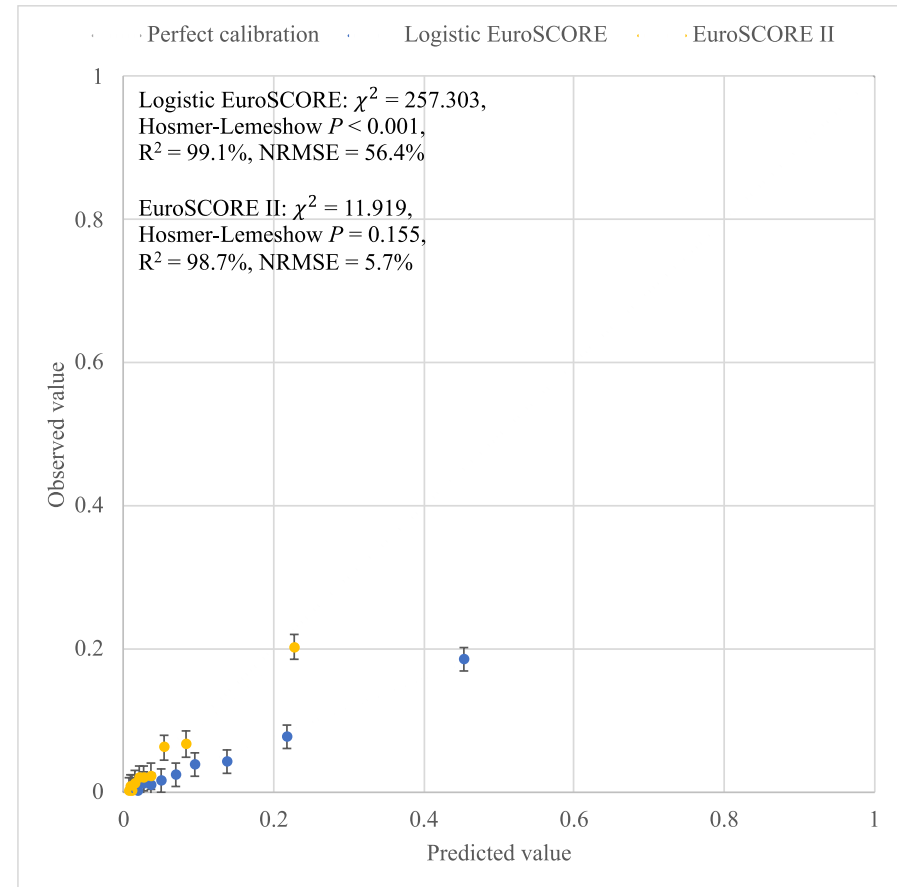
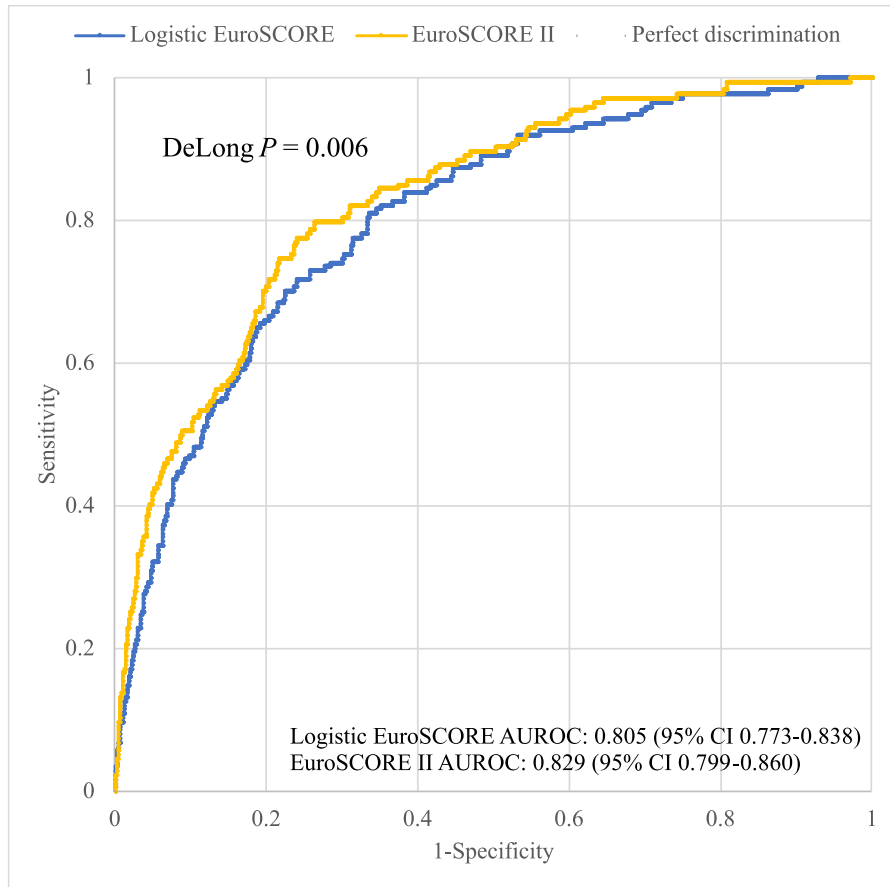
Supplement to: KHL Ng, K Wang, T Fujikawa, et al. Validation of EuroSCORE II in post-cardiac surgery patients in a tertiary institution in Hong Kong. Hong Kong Med J 2026 Apr;32(2):Epub 13 Apr 2026. <https://doi.org/10.12809/hkmj2514125>.

Supplementary FIG. Predictive performance of the European System for Cardiac Operative Risk Evaluation II for postoperative mortality. Receiver operating characteristic curves (left) and calibration curves (right) for (a) overall cohort, (b) isolated coronary artery bypass grafting (CABG), (c) isolated valve surgery, (d) aortic surgery, (e) combined valve and CABG, (f) combined valve or CABG and other procedures, and (g) other procedures

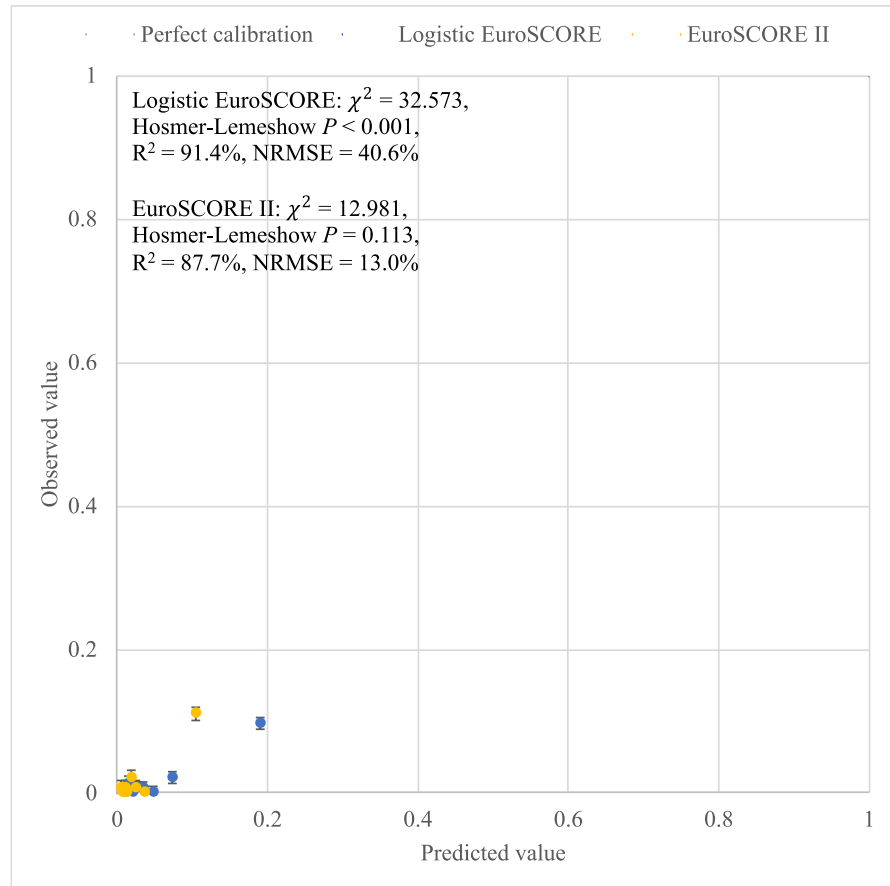
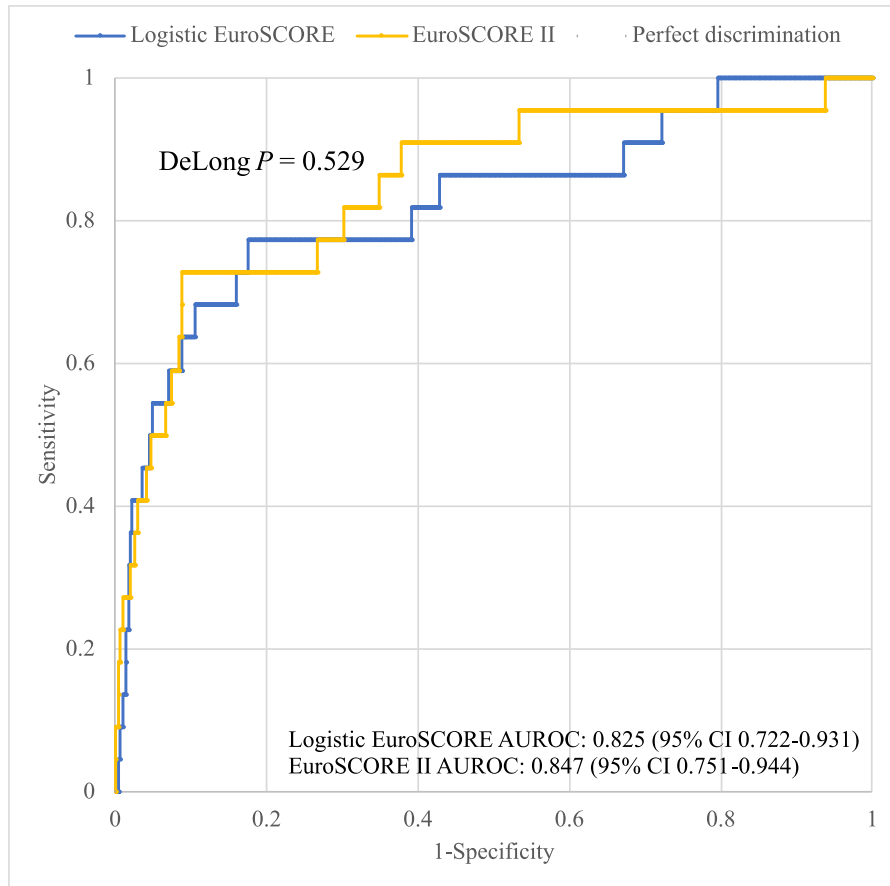
Abbreviations: 95% CI = 95% confidence interval; AUROC = area under the receiver operating characteristic curve; CABG = coronary artery bypass grafting; EuroSCORE = European System for Cardiac Operative Risk Evaluation; NRMSE = normalised root mean square error; R^2 = coefficient of determination

* The DeLong test assesses whether the difference between the AUROCs of two models is statistically significant, indicating the relative superiority of one model over the other in terms of predictive performance

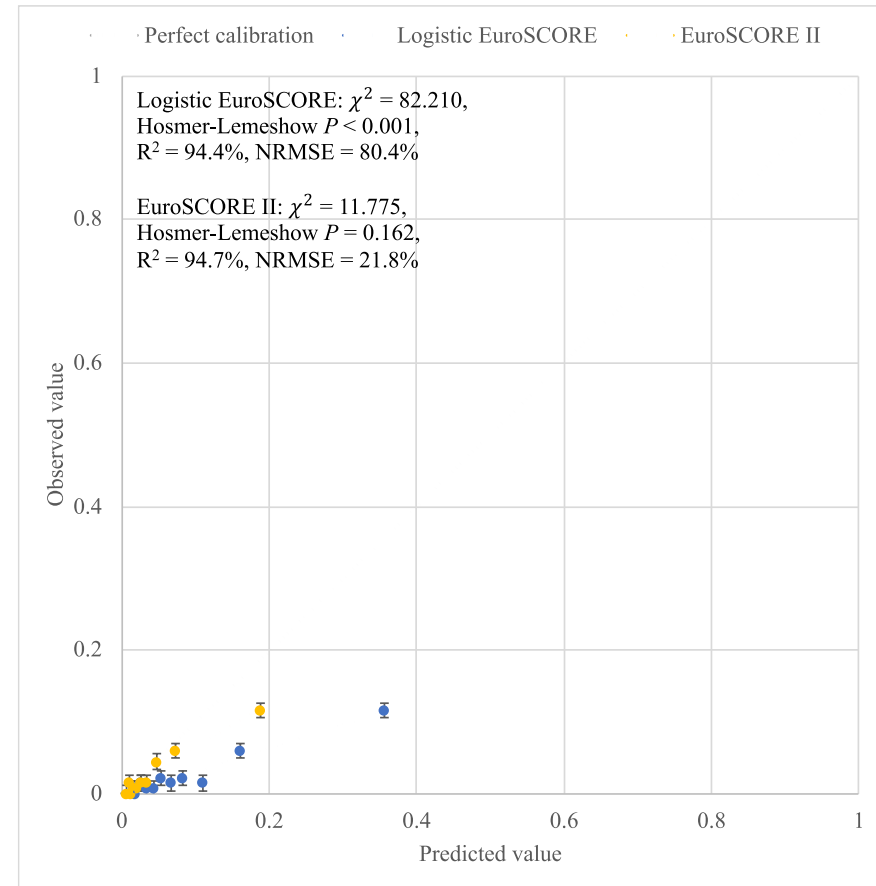
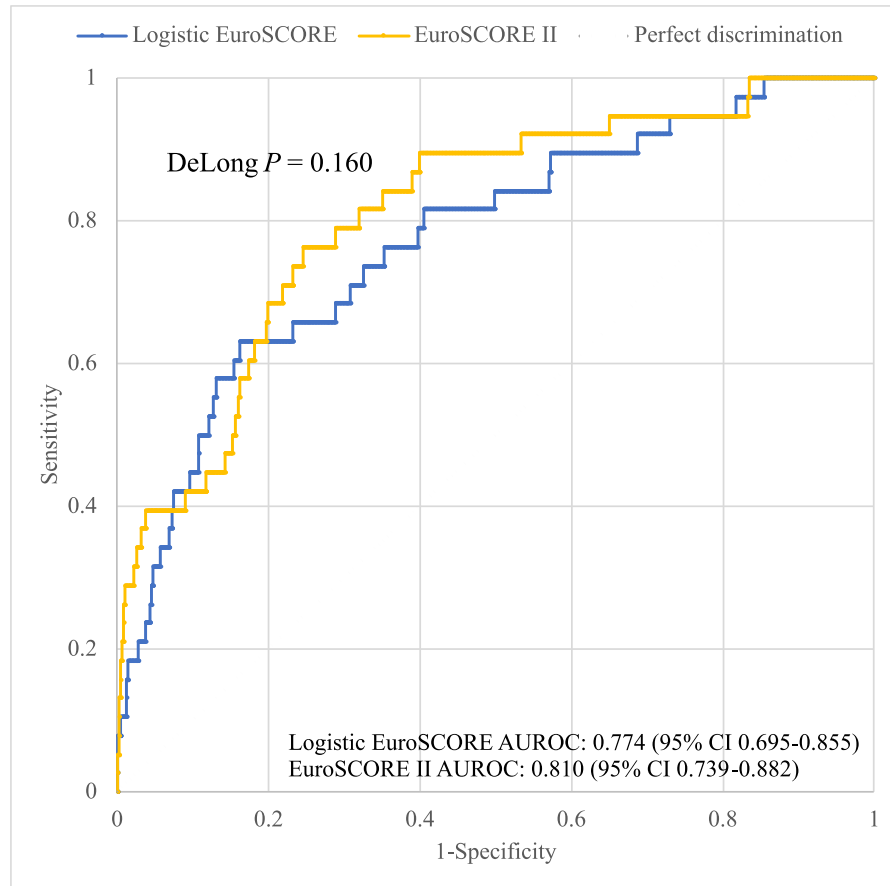
(a)



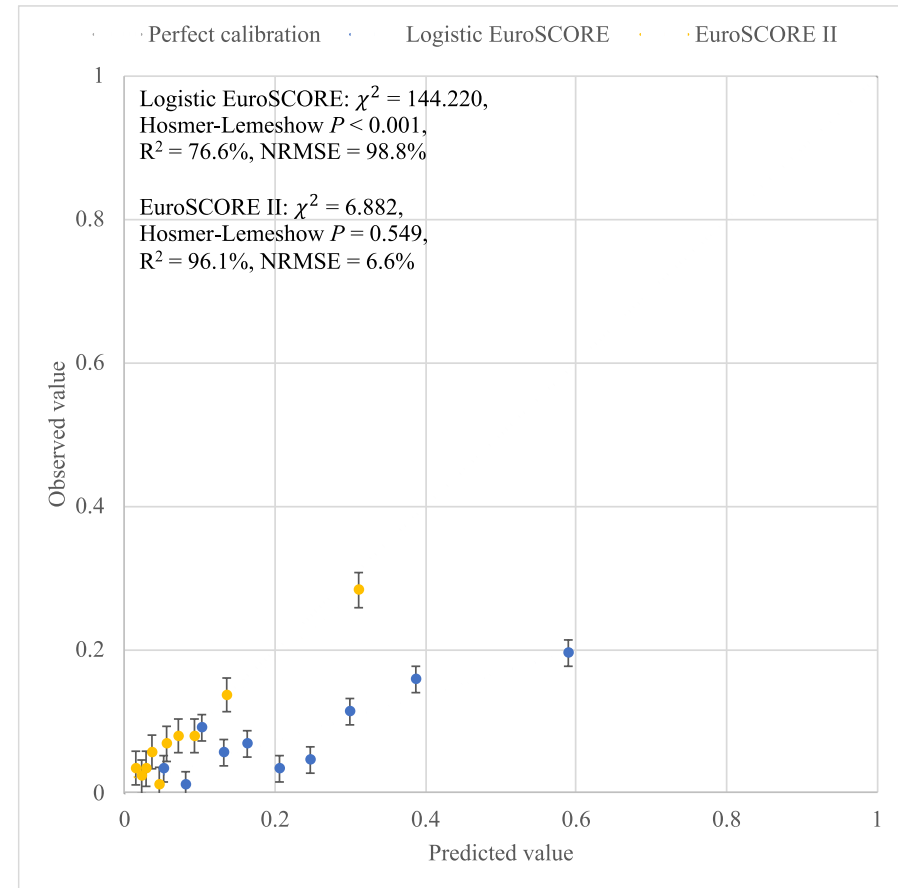
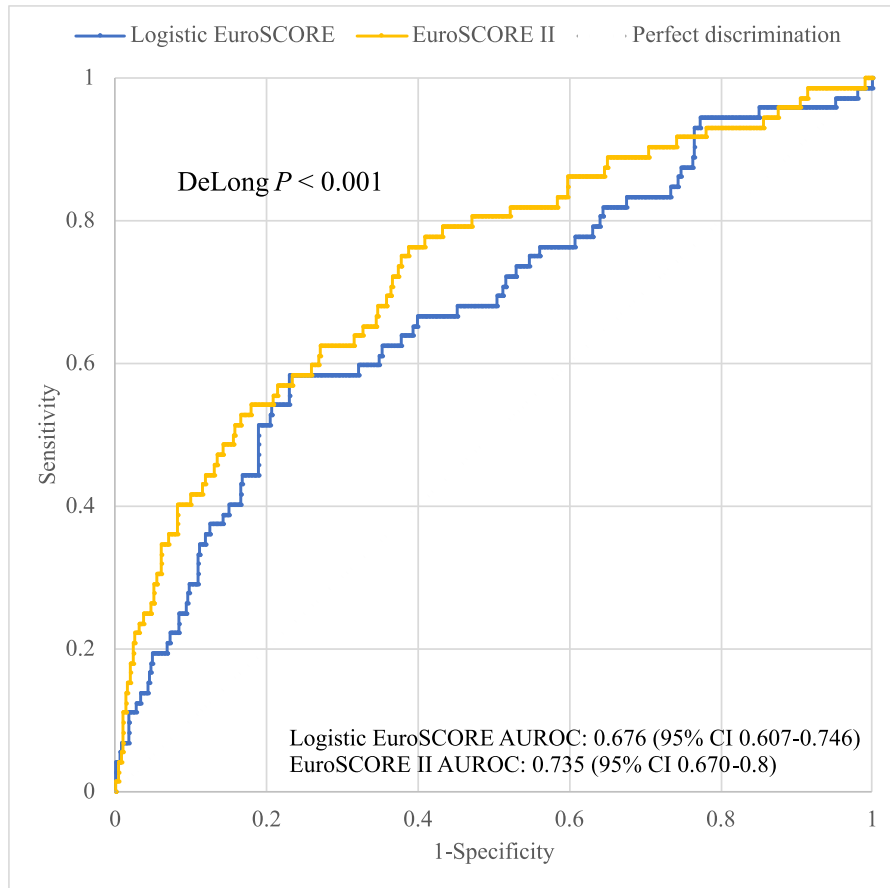
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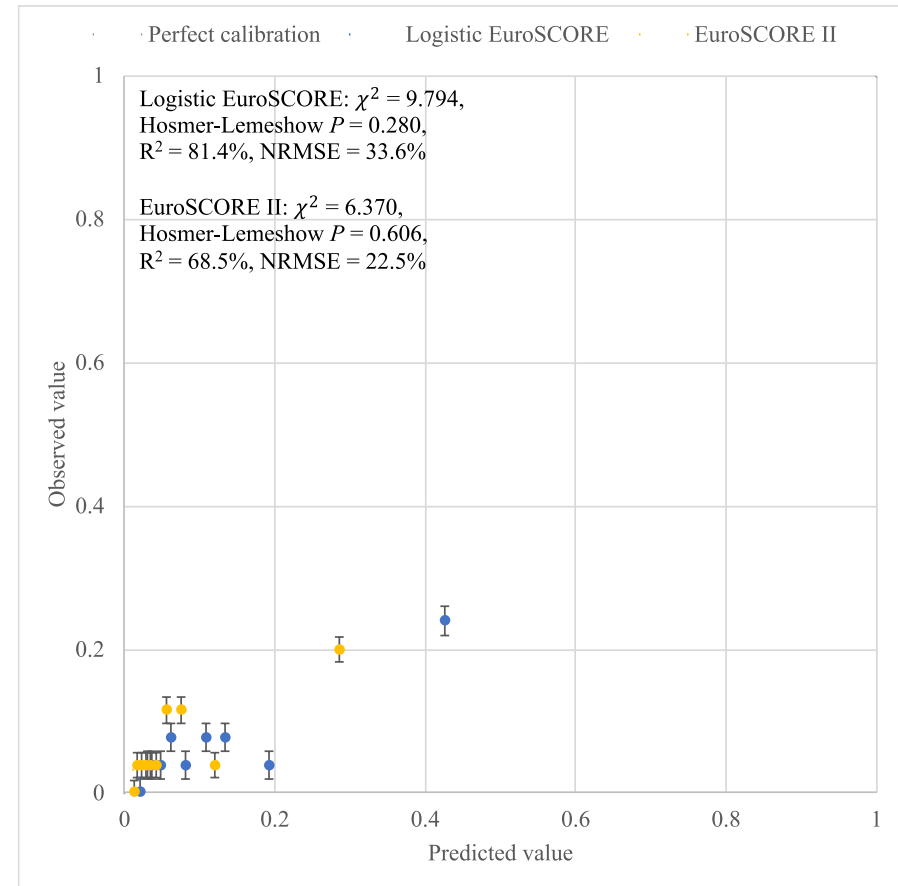
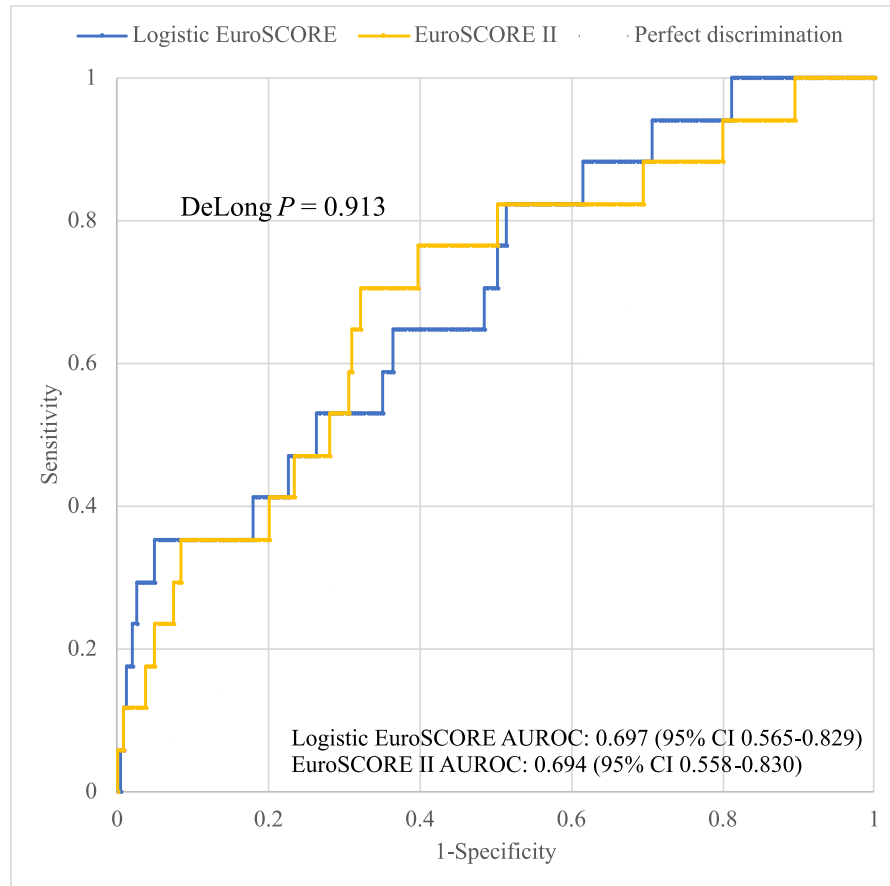
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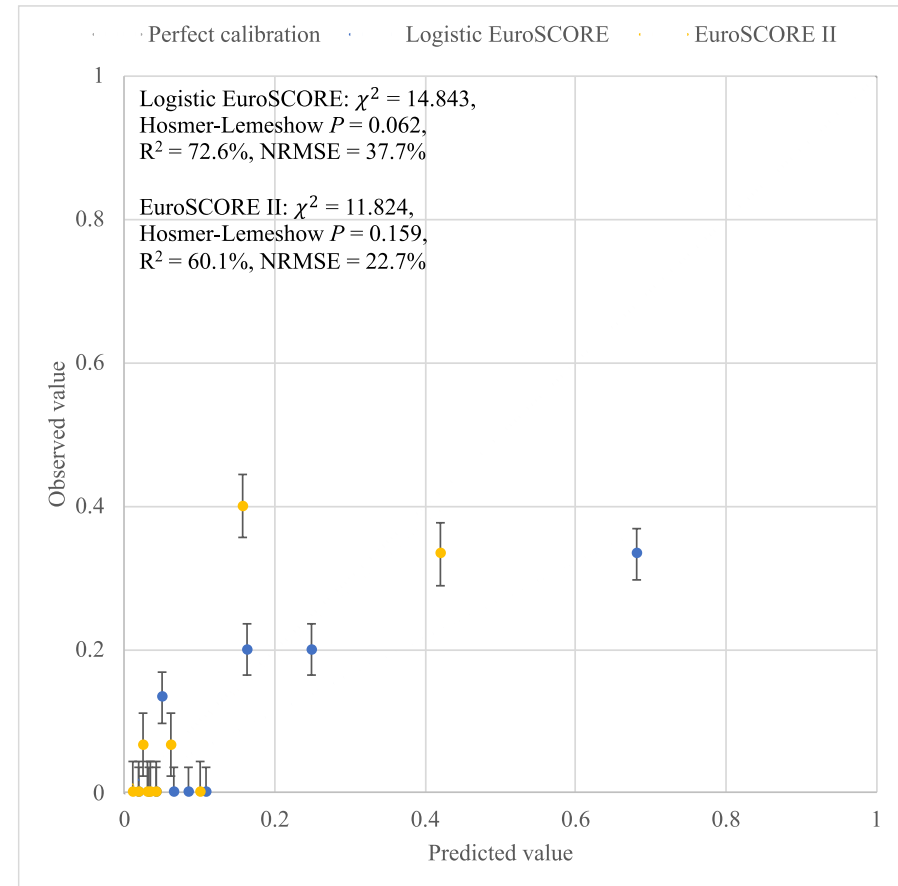
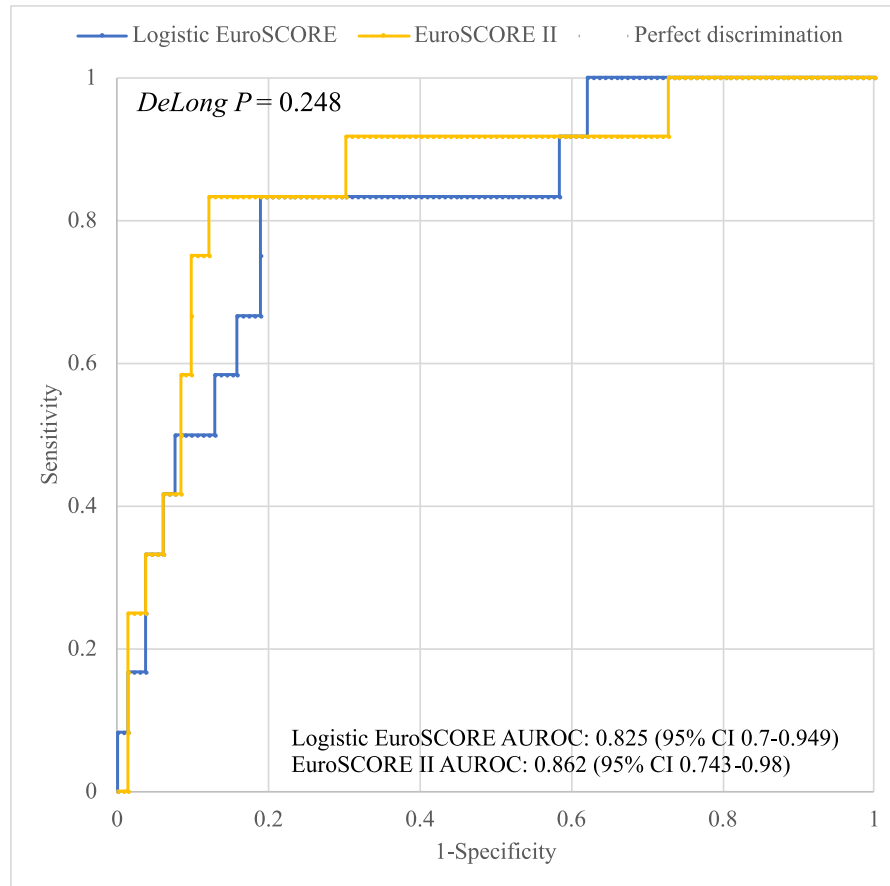
(d)



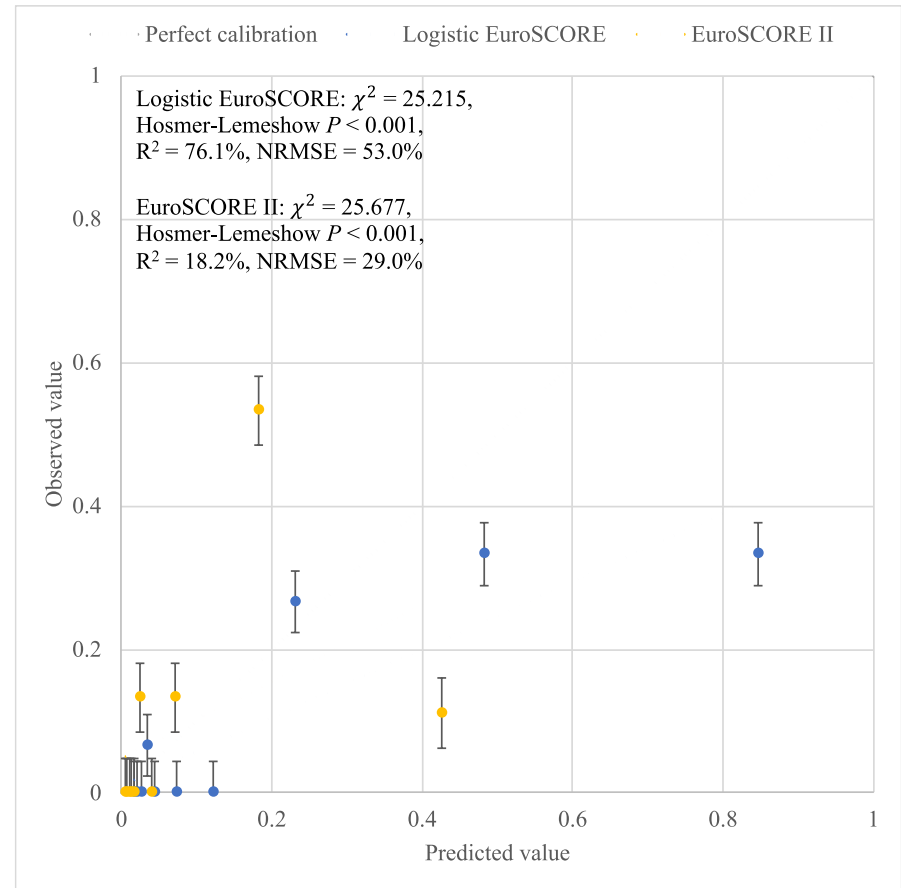
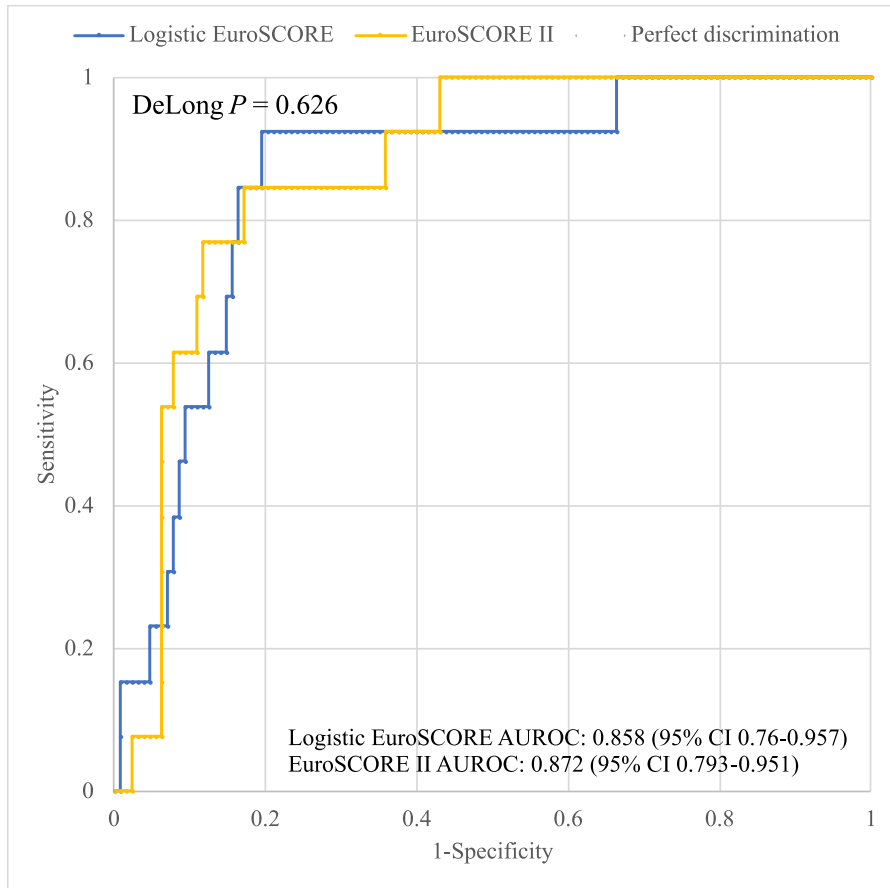
(e)



(f)



(g)



Supplementary Table. Sample size estimation^{1,2}

AUROC	0.79
Null hypothesis AUROC value	0.5
Prevalence (ratio of positive cases/total sample size)	0.022
Type I error rate (α)	0.05
Power (1- β)	0.8
Sample size (positive cases: 5; negative cases: 220)	225

Abbreviation: AUROC = area under the receiver operating characteristic curve

References

1. Chalmers J, Pullan M, Fabri B, et al. Validation of EuroSCORE II in a modern cohort of patients undergoing cardiac surgery. *Eur J Cardiothorac Surg* 2013;43:688-94.
2. Riley RD, Ensor J, Snell KI, et al. Calculating the sample size required for developing a clinical prediction model. *BMJ* 2020;368:m441.