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Performance of the recommended ESC/EASD cardiovascular risk stratification model in comparison to SCORE and NT-proBNP as a single biomarker for risk prediction in type 2 diabetes mellitus

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NT-proBNP could serve as a first-line screening tool that allows to safely and effectively rule out increased CV risk, while higher values would require further evaluation. In a second approach, additional cardiac investigations may be applied to further refine individual risk. A recent published study conducted in asymptomatic individuals with T2DM reported an additive predictive value of NT-proBNP combined with coronary artery calcium scoring [24]. Similarly, several other studies reported incremental prognostic information of NT-proBNP and troponin T when used in combination [13,14,15, 23].

The association of NT-proBNP with (CV) hospital admissions observed in this report indicates that NT-proBNP-guided risk stratification may also have the potential for overall cost reductions as already exemplified by previous natriuretic-guided trials in heart failure [38]. The use of NT-proBNP would omit the need for calculation of scores as well as the problem of nonclassification, misclassification or overfitting observed in global risk estimation models.

Yet, two trials provided initial evidence on the effectiveness of natriuretic peptides in guiding preventive efforts in patients at high risk for developing CVD events [19, 39]. In the prospective randomized controlled PONTIAC trial (NT-proBNP selected prevention of cardiac events in a population of diabetic patients without a history of cardiac disease)

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