

## Author's response

We would like to thank Prof. Kardesoglu et al. for their interest in our article.

The immediate therapeutic goal of reperfusion therapy in patients with acute ST elevation myocardial infarction (STEMI) is to restore full antegrade flow in the infarct-related epicardial coronary artery, as well as to achieve an adequate myocardial perfusion at tissue level. An interesting field of research is evaluating the success of reperfusion therapy, whether attained by pharmacological or percutaneous means. Even more interesting is predicting the 'ensuing' success of reperfusion therapy well before its implementation.

We agree with Prof. Kardesoglu et al. that ECG is an integral part of a comprehensive approach to evaluating reperfusion therapy. However, because it is an attractively simple bedside measurement, assessing ST segment resolution (STR) in leads previously showing ST segment elevation is the most widely used method of judging adequate myocardial reperfusion at tissue level, even in patients who have already achieved patency of the infarct-related epicardial coronary artery by primary percutaneous coronary intervention (PCI) [1].

Failure to improve tissue perfusion despite successful restoration of epicardial coronary flow ('no-reflow phenomenon') has been associated with poor clinical outcomes [2], and independently predicted six-month mortality [3].

Employing a 'simplified form' of the Selvester QRS score can reliably identify in advance patients with acute STEMI who would ultimately achieve successful STR following fibrinolytic therapy. One study has concluded that a high QRS score is an

independent predictor of incomplete STR and 30-day major cardiac events in patients with STEMI treated with primary PCI [4]. The evidence suggests that the extent of myocardial salvage when reperfusion is achieved with primary PCI is less time-dependent than that for fibrinolysis. The mechanisms underlying this disparity are still unclear; however, they may include restoration of full antegrade flow in the infarct-related artery with primary PCI, and decreasing efficacy of fibrinolytic agents as coronary thrombi mature with the passage of time [5]. Therefore, evaluating 'how far the infarction process has gone' would seem more essential in the setting of reperfusion by fibrinolytic regimens, rather than when it is intended by means of primary PCI.

### References

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