Letters to the Editor

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Comments on EMIP-FR study's editorial

In its September issue, the *European Heart Journal* published the results of the EMIP-FR study^[1] with an accompanying editorial by G. Tognoni^[2]. The editorial's author proposes 'two alternative explanations' for the results of the study: 'either the drug is perfectly inactive or the hypothesis has no clinical relevance nor implications'.

I believe that such an assumption over-simplifies the situation. Firstly, it is based on the hypothesis, made at the start of the study, that the principal action of trimetazidine is free radical scavenging, which now seems to be far from true, since the publication of the mode of action of this compound^[3]. Secondly, the discussion of the drug's activity has to be limited to the actual model used in the EMIP-FR study, that is, the activity after intravenous administration, of the given dose, within 24 h after AMI. Data derived from such a model do not justify interpolations to other clinical situations, in particular to its approved indication (stable angina), mode of administration (orally) and dosage $(60 \text{ mg} \cdot \text{day}^{-1})$.

In fact, we investigated trimetazidine's activity in such conditions in a TRIMPOL-2 study, reported at the recent ESC congress in Amsterdam^[4]. TRIMPOL-2 was a randomized, double-blind, placebo-controlled trial, which investigated the effects of trimetazidine vs placebo over 3 months, in 347 patients with stable angina uncontrolled by metoprolol alone. Results obtained in this large population confirmed previous work published on trimetazidine, that is, a significant improvement in stress test and clinical parameters, as compared to placebo. Results are currently being prepared for publication.

The results of the TRIMPOL-2 trial, and previous studies with trimetazidine, suggest that the conclusions from the EMIP-FR trial should

be limited to the actual clinical situation and the protocol applied in the study.

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References

- [1] The EMIP-FR Group. Effect of 48-h intravenous trimetazidine on short- and long-term outcomes of patients with acute myocardial infarction, with and without thrombolytic therapy. Eur Heart J 2000; 21: 1537–46.
- [2] Tognoni G. The EMIP Project. Eur Heart J 2000; 21: 1498–9.
- [3] Kantor PF, Lucien A, Kozak R, Lopaschuk GD. The antianginal drug trimetazidine shifts cardiac energy metabolism from fatty acid oxidation to glucose oxidation by inhibiting mitochondrial long-chain 3-ketoacyl CoA thiolase. Circ Res 2000; 86: 580–8.
- [4] Szwed H, Sadowski Z, Elikowski W et al. Efficacy and safety of trimetazidine in combination with metoprolol in patients with stable effort angina pectoris. TRIMPOL-II-double-blind, randomized, placebo-controlled, multicentre trial. Eur Heart J 2000; 21 (Abstract Suppl); 363: (1921).

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Comparison of low-molecular weight heparins to unfractionated heparin

We do not agree with the section entitled 'antithrombin drugs' in the Task Force Report on management of acute coronary syndromes without persistent ST segment elevation by Bertrand and colleagues[1], who compared low-molecular weight heparin to unfractionated heparin in the FRISC^[2] and FRISC II^[3] trials, and concluded in Fig. 4 that low-molecular weight heparin in FRISC II is better than unfractionated heparin. FRISC II as well as FRISC tested the lowmolecular weight heparin dalteparin against placebo and not against unfractionated heparin. Indeed, there are a few trials that compared lowmolecular weight heparin to unfractionated heparin (FRIC, ESSENCE, TIMI 11B, FRAXIS, Gurfinkel^[4]). Pooled analysis of these trials did not show any significant difference in the incidence of major vascular outcomes^[5].

In contrast to these trials, the results from FRISC II showed that dalteparin was superior to placebo and not to unfractionated heparin.

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References

- [1] Bertrand ME, Simoons ML, Fox KAA *et al.* Management of acute coronary syndromes: acute coronary syndromes without persistent ST segment elevation. Eur Heart J 2000; 21: 1406–32, doi: 10.1053/euhj.2000.2301.
- [2] FRISC Investigators. Low-molecular-weight heparin during instability in coronary artery disease, Fragmin during instability in coronary artery disease (FRISC) study group. Lancet 1996; 347: 561–8.
- [3] FRISC II Investigators. Invasive compared with non-invasive treatment in unstable coronary-artery disease: FRISC II prospective randomised multicentre study. Fragmin and fast revascularisation during instability in coronary artery disease investigators. Lancet 1999; 354: 708–15.
- [4] Gurfinkel EP, Manos EJ, Mejail RI et al. Low molecular weight heparin versus regular heparin or aspirin in the treatment of unstable angina and silent ischemia. J Am Coll Cardiol 1995; 26: 313–18.
- [5] Eikelboom JW, Anand SS, Malmberg K, Weitz JI, Ginsber JS, Yusuf S. Unfractionated heparin and lowmolecular-weight heparin in acute coronary syndrome without ST elevation: a meta-analysis. Lancet 2000; 355: 1936–42.

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Acute myocardial infarction in diabetic patients. Are we actually doing bad?

We read with great interest the paper by Gustafsson and co-workers^[1] in a December 2000 issue of the journal, in which the detrimental effect of diabetes on long-term mortality in patients with acute myocardial infarction (AMI) is well documented. In this study, the authors point out the lower frequency of reperfusion therapy prescription in diabetic patients as a main cause of their higher mortality when suffering an AMI in comparison with non diabetics^[2].