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**Reply to: Response to Conroy et al. SCORE Project**

We welcome the contribution from Drs Assman, Cullen, Hense and Schulte. The issues which they raise are among the many which were debated at the SCORE project workshops, and, indeed, we gratefully acknowledge the participation of Drs Cullen and Schulte in these workshops. Their views are given added significance as three of the four authors have themselves authored guidelines for prevention of coronary heart disease.

Their first comment concerns the disadvantages of calculating total cardiovascular risk rather than risk of coronary heart disease alone. We would like to reiterate our concern that by concentrating on coronary heart disease alone, the true health consequences of the person's risk factors will be misrepresented. Prevention must address the problems of the patient, not just the concerns of the cardiologist. However, as we note in the paper, the SCORE formula can be used to calculate coronary heart disease and other cardiovascular disease separately, and so make it possible to calculate the relative contribution of each risk to the total burden. We incorporated this feature, however, to aid economic analysis rather than to encourage the adoption of a narrow, disease specific focus to prevention. We do, of course, acknowledge that such a focus still has its proponents among physicians.

We are also familiar with the drawbacks of using fatal events alone to estimate risk, and discuss this in our paper.<sup>1</sup> Space precludes rehearsing the arguments again, but we should note that whatever the drawbacks of using fatal events only, this approach opens up the possibility of evidence-based clinical management of cardiovascular risk factors for countries without morbidity data-which includes a significant proportion of Europe. Even countries in which there are population-based cohort studies may face the dilemma of basing risk prediction on ageing data which uses different definitions of nonfatal events to those in current clinical practice. The SCORECARD initiative will be adapting the SCORE risk estimation method for use in forty countries, based on national mortality data.

While there are many factors which are statistically associated with coronary heart disease, their usefulness in identifying important numbers of persons at significant risk who would otherwise have

been undetected remains poorly documented. Clearly, identifying strategies for optimal identification of persons at risk is a current research priority, but we would argue that an important component of this is to identify the *least* number of tests and the appropriate sections of the patient population to which these should be applied, rather than advocating a complex assessment system to be applied to all (see Wilson<sup>2</sup> for an interesting illustration of this approach). Less, not more complexity is required if risk estimation is to pass from being an epidemiological toy to being a clinical tool.

Epidemiological professionals with a long experience of risk estimation may tend to lose sight of the realities of cardiovascular disease prevention in clinical practice. We in the SCORE partnership are conscious of the current vast gap between the aspirations of guidelines and the realities of practice.<sup>3</sup> For this reason, we have tried to keep risk assessment as simple and speedy as possible. Rather than wrapping every epidemiological risk factor into a 'polypill' assessment, we have been trying to add some simple order to what is still the chaotic process of clinical risk evaluation. Physicians may indeed be willing to use more complex methods. History, however, provides little comfort for this belief.

**References**

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3. David A. Wood and EUROASPIRE I and II Group. Clinical reality of coronary prevention guidelines: a comparison of EUROASPIRE I and II in nine countries. *Lancet* 2001; 357:995-1001.

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**Transport for primary PCI in AMI: one-way or roundtrip journey?**

The study of Widimsky et al.,<sup>1</sup> which appeared recently in the European Heart Journal, clearly support a strategy of long

distance transport from community hospitals to tertiary percutaneous coronary intervention centres for intervention in acute myocardial infarction. These data are important and should add substantial changes to the current treatment strategies of acute myocardial infarction worldwide. However, we believe that there is still an unanswered question. What happens to the patient transported to the hub centre after successful percutaneous coronary intervention? Should all patients be observed overnight or 24-h in the interventional centre and then transferred back to the community hospital? Or should all low risk subjects be transported back to the spoke centre immediately? Although this point has not been addressed sufficiently in the literature, it has important clinical, logistic and legal drawbacks both for the percutaneous coronary intervention centre and for the non-interventional hospital. Therefore, we would like to know which policy was applied in the PRAGUE-2 study.

**References**

1. Widimsky P, Budesinsky T, Vorac D et al. Long distance transport for primary angioplasty vs immediate thrombolysis in acute myocardial infarction. Final results of the randomized national multicentre trial-PRAGUE-2. *Eur Heart J* 2003;24:94-104.

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**Transport for primary PCI in AMI: one-way or roundtrip journey?**

Dr G. Casella and P. C. Pavesi from Bologna are asking about the policy for transportation AFTER primary PCI back from the 'hub' to the 'spoke' centre in the PRAGUE-2 trial. All patients in the PRAGUE-2 trial remained after primary PCI in the 'hub' centre at least until groin compression was removed (12-18 h post procedure). Most of them have been transferred back to 'spoke' centre after >24 h. Patients with cardiogenic shock, heart failure or severe stenosis of other (non-infarct) coronary artery (or arteries) usually remained at the PCI (hub) centre until stabilization or until revascularization of other critical and clinically

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