

# Authors' reply

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EDITOR—In reply to White, extrapolating risk scores to ages over 75 is desirable, but our data (like those of others) include few such elderly subjects. The benefits of stopping smoking are not immediate so recent former smokers may be counted as current smokers. Showing the reduction in risk, however, if counted as a non-smoker may help motivation.

For blood pressure, cholesterol and creatinine concentrations we would encourage use of averages of repeat recent measurements if available since this reduces within-subject variation. Our study used at least three seated blood pressures. Evidence of left ventricular hypertrophy was provided by electrocardiogram..

Patients' changes in risk score are valuable, especially if efforts to reduce risk are happening. Do, however, emphasise comparison with others of the same age and sex (our figure 3), since the inevitable risk increase with age may otherwise disappoint.

We appreciate Pettilä's desire for independent validation, but in this instance it is unrealistic. One would need a new current large cohort of subjects, screened for all risk factors and followed up for five years. From which populations would they come, what inclusion criteria would apply, and how long can we wait for such validation?

It cannot realistically be done in time or with sufficient representativeness. As Vesti-Nielsen points out, any risk score for predicting five year cardiovascular mortality is by definition based on old data. We could adopt the defeatist stance that we cannot predict the future, and a person's true risk is dependent on time and place (and countless other features). This negative attitude is not shared by thousands of people accessing our website (<http://www.riskscore.org.uk/>) to quantify individual risk. We argue that our risk score is based on a large international database of high quality. The established nature of the risk factors we included and the large number of deaths observed mean we have a precise estimation of individual risk.

It would be naive to propose that the risk score and its consequent probability of cardiovascular death within five years give the true exact future risk for each individual. But that is not really the point. Our risk score should be seen as a motivational tool that encourages assessment of a patient's overall risk rather than focusing on a single factor—for example, blood pressure. This has been achieved in a style that many primary care physicians and other health professionals are finding useful. Many people might prefer to have their own copy of our risk score program rather than accessing our website. If so, please email Mike Bennett ([mike.bennett@lshtm.ac.uk](mailto:mike.bennett@lshtm.ac.uk)), whom we thank for writing this program.