About the pleiotropic effects of statins in human

Sir,

We read with interest the recent report by Usui et al. [1] in NDT regarding the pleiotropic effects of the HMG-CoA reductase inhibitor cerivastatin on glomerular injury and blood pressure in rats with streptozotocin-induced diabetes. Previously, we showed that simvastatin given in a random order blind fashion to normotensive type 2 diabetic patients (T2DM) with increased urinary albumin excretion (AER +) was able to significantly reduce AER as compared to placebo [2]. Later, we could show that simvastatin and cholesterylamine were equally effective in reducing total and LDL cholesterol in borderline hypertensive AER+ T2DM, but only simvastatin significantly decreased AER, blood pressure and urinary glycosaminoglycan excretion [3]. These data clearly showed, for the first time in humans, that the effects of simvastatin are largely independent from the reduction of LDL cholesterol. Besides the proposed mechanisms [1,4], at the moment we are working on the hypothesis that statins might influence AER in T2DM subjects, affecting LDL oxidation status and autoantibodies against oxidized LDL. This hypothesis is in line with our previous demonstration that the LDL-C/triglyceride ratio in plasma (modified after statin therapy) correlates well with the oxidative status [5].


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