

WOUTER

Lipid lowering is a nice thing if your LDL goes down. But patients are, of course, not bothered by their LDL. They are bothered by the problem that LDL causes, atherosclerosis. They don't feel LDL. They will feel what it's leading to. They will feel the angina. They will feel the myocardial infarctions. They will experience the CABG. And they may even die from atherosclerosis.

JUKEMA:

So if you have a novel compound, it should not only lower LDL, it should diminish clinical events. And if you look at the trials-- both Fourier but, I think also, it's beautifully depicted in the ODYSSEY Outcomes New England paper-- you look at the endpoints. And it's very, very consistent. So whatever endpoint you look at, it's always reduced-- I mean atherosclerotic endpoints-- less CABG, less PCI, less myocardial infarction, less stroke-- which was not even anticipated-- less cardiovascular death, and total mortality is less.

You look at it, and it's biologically extremely plausible and very consistent. So there is-- if you look at biology, it's unrealistic to think that these things are not connected. And also here at the congress in Chicago, it is clearly presented that these diseases are connected.

So if you have multiple coronary incidents, it will lead sooner to death. If you have these type of problems, they're all connected. They will lead to more events, and more events on average will lead to more cardiovascular death and finally to all death. So it's really important to realize, if you look at this type of medication, that it's all very consistent.

So there is no reason not to think, like also with the statins, that they will not only reduce atherosclerosis, they will disease. And finally, I'm convinced on the long run they will also reduce mortality.

With statins, it took us a long, long time to make this point. First of all, we showed that it was reducing atherosclerosis. Then we showed that it reduced myocardial infarctions. Then we showed, finally, that it reduced mortality.

And I think with PCSK9 we are going in the same route. We showed LDL was lowered. We showed less MI, all cardiovascular endpoints. And we're now heading clearly in the direction of reduced total mortality.

And of course, I do realize that we have only a couple of years' experience, both in clinic and in trials, with these new PCSK9 inhibitors. So the long run, of course, has to teach us. But with the current knowledge, there is no reason to think that PCSK9 inhibitors will not do the trick.