

What was really a privilege for me to be able to present the ODYSSEY Outcomes economic study. I was lucky to just present that at the American Heart Association annual meetings at a late breaking clinical trial session. And really the goal of that was to see what the value based price of alirocumab would be.

So obviously, looking at the actual cost, that's a fluid sort of thing, whatever the price might be. So we didn't choose that approach. We rather thought, let's work backwards. We've got the clinical trial data. We've had patient level data. We've got actual event rates observed in the trial.

Let's use that and extrapolating from that data for longer term mortality. Because of course, going beyond four or five years, there's not data from ODYSSEY per say. So we had to model, using approved conventional cost effectiveness statistical modeling paradigms.

And what we found in doing that was that the price at which alirocumab would be cost effective was \$6,300. And that's using \$100,000 per quality adjusted life year, as the willingness to pay threshold. Now, just to say a little bit about that number, I think many doctors still have in their mind the \$50,000 a year, based on the older dialysis literature from many, many years ago.

But obviously, things have changed. There's been a lot of inflation. So at least in the cost effectiveness world, 100,000 is a new 50,000. So that's the range that most health care economists use.

Some go up to \$150,000 per quality adjusted life year in high income countries. And some still do anchor at 50,000, especially for lower income countries. But at any rate, at \$100,000 per quality adjusted life year, that was the magic number we got to for the overall ODYSSEY trial \$6,300.

Now, on the other hand, if one is willing to look into subgroups, we saw more clinical benefit in ODYSSEY Outcomes in those who had a baseline LDL cholesterol greater than 100. And therefore, we also looked at cost effective that way. And indeed, as one might expect, because of greater clinical benefit, there's greater cost effectiveness, as well. And there, the actual value based price would go up to about \$13,000 or so, not that I'm endorsing that sort of price. But that's what the numbers work out to. I think the more secure finding, frankly, is the one for the overall trial, instead of delving into subgroups.

On the flip side of that, however, if one is going down subgroups, then the subgroup of LDL less than 100 looks quite cost ineffective really until getting down to a price of about \$2,000 or so. Even at \$150,000 dollars per quality adjusted life year willingness to pay threshold, alirocumab was not cost effective in ODYSSEY Outcomes when the LDL was less than 100.

So I think putting together the clinical benefits, the absolute clinical benefits seen in Odyssey outcomes in that subgroup with baseline LDL greater than 100, and the cost effectiveness analysis that essentially parallels that, I think the target population for alirocumab were the drug would likely be most cost effective is in those ACS patients, who've got a baseline LDL cholesterol greater than or equal 100, despite maximally tolerated statin therapy. And I guess I'd throw some ezetimibe in there too. But if the LDL is still greater than or equal to 100, that's where I think alirocumab potentially would have its greatest cost effectiveness.