

Video transcript: ORION-4 Introduction for participants, Professor Louise Bowman

ORION-4 is a medical research study investigating the effects of a new medicine called inclisiran. Inclisiran works to lower levels of the bad cholesterol in the blood (known as the LDL cholesterol) and doctors think this might help to reduce the chances of having a heart attack or a stroke.

We have known for many years that cholesterol is an important risk factor for vascular disease and indeed there are treatments already available, especially the statins, which work very well to lower cholesterol and which have been shown to reduce heart attacks and strokes.

Inclisiran is a new medicine, not yet available to be prescribed, which might work on top of the benefits of a statin to further lower the risk of major circulatory problems. However, unlike many medications, inclisiran is given as an injection. A very small needle is used to give the injection just under the skin, typically in the stomach area. The injection only needs to be given once every 6 months in the long term (with an additional booster when it is first started). Doctors hope this might be a real advantage for this medicine as it may be easier than taking tablets every day.

In order to find out if this new medicine works we need to do a large clinical trial, ORION-4, to examine it very carefully and see if it does indeed help to prevent heart attacks and strokes and, importantly, to check that it is safe to be taken long term.

To do this ORION-4 will include 15,000 people (all of whom have previously had some form of vascular disease – as we know that cholesterol is particularly important for them). Half the volunteers will receive inclisiran and half will receive a dummy version (a placebo), although neither they, nor the research staff in the study clinic, nor those of us running the study centrally will know, on a day-to-day basis who is on the real thing and who is getting the placebo. This is really important to help us to ensure we give it a completely fair test and don't introduce any bias when it comes to reporting of any possible side effects.

The study will carry on for at least 5 years, which is also very important if we are definitely going to make sure we get a clear and reliable answer. We know that the benefits of the statins take many months to emerge and we expect the same will be true here, so it's important that we continue for long enough in order to get the right answer, and to be certain that we check if inclisiran is shown to be safe, especially as the results of this trial could affect medical treatments for millions of people round the world who have circulatory problems.

If you have been invited to take part in the study then you will have received a leaflet containing more information. Please do read it carefully before you decide whether to take part or not, and do feel free to contact the research team if you have any questions.

Thank you for your interest in this important medical research study.