

**Project title:** Statins and cardiovascular or diabetes risk in the long-term: a retrospective cohort study using electronic health records.

**Invitation:** Lay advisers are needed to help advice on the design and findings of a research project examining how patients consuming statins reduce their cholesterol levels, changing their risk of suffering cardiovascular diseases or diabetes during long periods of observation. We are particularly interested in involving individuals who have received more than two prescriptions of statins ever and whose body weight is regularly monitored in primary care. However, if you have a general interest in the project, we would also be keen to hear from you.

**Background:** Statin drugs are commonly used to reduce high levels of 'bad cholesterol' or low-density lipoprotein (LDL) cholesterol. Over the years, excessive LDL cholesterol can gradually accumulate in the body, increasing the risk of cardiovascular diseases such as heart attacks and strokes and early death. For those reasons, doctors usually monitor LDL cholesterol levels in people aged over 50 years and may start treatment with statin to lower the cholesterol.

Currently, doctors know statins reduce LDL cholesterol levels in the short term. However, they know much less about how statins control the LDL cholesterol level in the long-term (for example, after 5 years of treatment). Since the treatment with statins is usually for the rest of a lifetime, this kind of long-term evidence is essential for both doctors and patients to make decisions about their use of statins.

Some research also suggests that long-term statins use can increase the risk of getting for diabetes. Since statins are frequently used for many years, we need further studies to clarify the potential risks associated with long-term use of statins.

**Aims:** Our study aims first to understand the association between long-term statins use and LDL cholesterol control. Then, we will verify how effective this control is to reduce the risk of cardiovascular diseases. Finally, we will examine if developing collateral diabetes is a real risk that needs to be tackled at the time statins are prescribed. The findings of our study will inform both prescribers and long-term users of statin.

**The role of the lay advisors:** At this point in time, we are keen to get advice from one to two individual(s) on our written application for funding; particularly the sections that need completion in plain English to ensure they are jargon free and clear.

We would also be keen to make a plan on how to involve lay advisers at each step of the project going forward beyond the design, through analysis to interpretation, dissemination, and publication of the results. This plan will then be included as part of the grant application. We plan to start the project on 01 Jul 2020 and undertake the research in 12 months.

The position for the lay advisor will be voluntary but we plan to include a budget in our application to help reimburse travel costs, provide refreshments at meetings and a small thank you gift for your time on completion of the project.

**Who to contact if interested:** Please contact Mr JC Bazo-Alvarez on Tel: 07376076260 or E-mail: [juan.alvarez.16@ucl.ac.uk](mailto:juan.alvarez.16@ucl.ac.uk) for further information. JC Bazo-Alvarez is the lead researcher for this project. He is an epidemiologist and undertakes his research at the Research Department of Primary Care & Population Health at the Royal Free Hospital, University College London.