initiation over time and patient characteristics associated with initiation.

Results: We identified 460,154 patients who underwent moderate- to high-risk non-cardiac elective surgery between 2003 and 2012 and had no statin prior to the assessment window. Of those, 5,628 (1.2%) initiated a statin within 30 days of surgery. The rate of initiation progressively increased from 0.8 per 100 procedures in 2003 to 1.5 per 100 procedures in 2012. The increase was more pronounced among patients with revised cardiac risk index (RCRI) score ≥2 and patients undergoing vascular surgery, with initiation rates equal to 7.4% and 14.9% respectively by the end of 2012. Compared to non-initiators, statin initiators were older, more likely to be male, had more frequently cardiovascular or renal disease, and more often underwent vascular surgery.

Conclusions: The rate of statin initiation progressively increased from 2003 to 2012, particularly among older patients with higher RCRI and undergoing major vascular surgery. Research is needed to further define the risks and benefits of initiation of statins prior to surgery.

3. Pattern of Risks of Rheumatoid Arthritis among Patients Using Statins: a Cohort Study with the Clinical Practice Research Datalink

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Background: Previous studies evaluating the effect of statins on developing rheumatoid arthritis (RA) have shown conflicting results.

Objectives: To examine the association between statin use and the risk of RA in a large population-based cohort in the United Kingdom (UK), with a special focus on describing the patterns of risks of RA during statin exposure.

Methods: A retrospective cohort study using the UK Clinical Practice Research Datalink was conducted. All patients aged ≥40 years, who had at least one prescription of statins during the period 1995-2009 were selected and matched by age, sex and date of first prescription of statins to controls (patients not using statins). All patients were followed up for the development of RA. Patients were considered as having a diagnosis of RA if the first-time diagnosis registered by general practitioners was verified by the use of at least one prescription of disease modifying anti-rheumatic drugs. The follow-up period of statin users was divided into periods of current, recent and past exposure, with patients moving between these three exposure categories over time. Time-dependent Cox models were used to derive hazard ratios of RA, adjusted for disease history and previous drug use.

Results: The study population included 1,023,240 patients, of whom 511,620 received a prescription of statins. No associations were found between RA and current or past users of statins. However, in patients who currently used statins, there were substantial changes in the hazard rates of RA over time: hazard rates were increased shortly after the first prescription of statins and then gradually decreased to baseline level. The risk of developing RA was increased in patients who recently used statins, as compared to non-users (HR$_{adj}$, 1.41; 95% CI: 1.12-1.79).

Conclusions: The risk of RA is substantially increased in the first year after the start of statins and then diminishes to baseline level. These findings suggest that statins might accelerate disease onset in patients susceptible to developing RA. Alternatively, confounding by cardiovascular risk factors and diagnostic suspicion bias may have influenced the findings.

4. Statin Use and Cholesterol Levels among US Adults with Age-Related Macular Degeneration (AMD): Findings from the 2005-2008 National Health and Nutrition Examination Survey (NHANES)

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Background: Age is a risk factor for both AMD and cardiovascular disease (CVD). A growing body of literature indicates an involvement of lipids in the pathogenesis of AMD.

Objectives: To estimate a) mean HDL-C and LDL-C levels, b) the prevalence of statin use and c) the relationship between HDL-C and AMD in the US.

Methods: Individuals ≥40 years old who had completed interview, examination and gradable retinal images in NHANES 2005-2008, a population-based national cross-sectional survey, were included in this analysis.