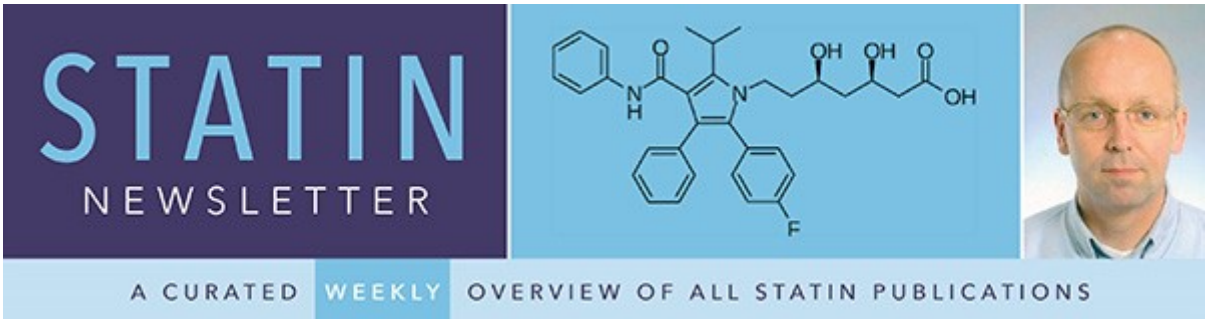

Update week 11 & 12 - 2023

Dr. Peter Lansberg is a Dutch lipidologist, educator and innovator. He has been instrumental in setting up The Dutch National Lipid Clinic Network, the Dutch Lipid Clinic Criteria for Familial Hypercholesterolemia (FH), and the Dutch National FH screening program

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The Statin Newsletter will keep you up-to-date with all recent statin publications. Based on a curated approach to select relevant articles.

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Key Publications

1. **SGLT2i and statins; a strong and safe combo.**
2. **Statins and glycemic control - what can we expect to see?**
3. **Can we predict who will, and who will not adhere to statins.**
4. **Pharmacists can improve statin adherence in diabetic patients**
5. **The SWEDEHEART registry: statins after ACS in CKD patients?**

The risk of muscle toxicity when combining SGLT2i with a statin

Concomitant use of statins sodium-glucose co-transporter 2 inhibitors (SGLT2i) is frequently observed in type 2 diabetics likely to see substantial benefit from both drug classes. In this study "Concomitant use of statins and SGLT2i and the risk of myotoxicity investigates the potential interaction between SGLT2i and statins and their risk for myotoxicity. The study uses data from the Food and Drug Administration Adverse Event Reporting System (FAERS) from 2013 to 2021 and estimates several measures of disproportionate reporting of myopathy and rhabdomyolysis associated with concomitant use of SGLT2i and statins. The study finds no increased risk of myotoxicity reporting associated with concomitant use of SGLT2 inhibitors and statins. Previously detected weak safety signals with specific SGLT2 inhibitor-statin pairs were not detected in this study after using various signal detection methods, and also restricting the study period. These results support previous work and argue against a potential interaction between these commonly used medications. The study contributes to the field by using a 'customized' definition of myopathy, which improves specificity and assessing the reporting risk of rhabdomyolysis. It also used a combination of frequentist and Bayesian signal detection methods and explored the potential impact of stimulated reporting, which is an inherent challenge in pharmacovigilance analyses. However, the study has limitations, including reporting bias

and confounding. The absence of a signal does not guarantee the safety of a drug or a drug interaction, but the totality of available evidence supports the notion that an excess myotoxic risk due to the concomitant use of statins and SGLT2 inhibitors is not likely. The study's results should raise awareness about the importance of accounting for stimulated reporting in pharmacovigilance analyses.

Concomitant use of statins and sodium-glucose co-transporter 2 inhibitors and the risk of myotoxicity reporting - A disproportionality analysis. Br J Clin Pharmacol 2023; Gravel CA, Krewski D, Mattison DR *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36912450

Meta-analysis on the effect of statins on glycaemic control

In this systematic review and meta-analysis studied the effects of statin therapy on glycemic control and insulin resistance were evaluated. The analysis included 67 studies, investigating over 25,000 individuals. Results indicated that statins increased glycosylated hemoglobin (HbA1c) levels and homeostatic model insulin resistance (HOMA-IR) index in both individuals with altered and normal glycemic control. The type or dosage of statins did not seem to influence the diabetogenic effect. This study confirmed the diabetogenic effect of statins found in previous analyses. Atorvastatin consistently worsened glucose metabolism while pravastatin was only diabetogenic in insulin-resistant individuals. The analysis did not find an association between statin dosage or duration and the diabetogenic effect of statins. Though the underlying mechanisms of statins diabetogenic effect are not fully understood, several theories have been postulated, including inhibition of CoQ10 synthesis, reduced capacity to synthesize fatty acids, increased fat and calorie intake, and impaired skeletal muscle GLUT4 translocation. More research is needed to determine the specific mechanisms involved in statins' diabetogenic effect.

Effects of statin therapy on glycemic control and insulin resistance: A systematic review and meta-analysis. Eur J Pharmacol 2023:175672Alvarez-Jimenez L, Morales-Palomo F, Moreno-Cabañas A *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36965747

Who will stop taking statins? A risk prediction model

Non-adherence to statin therapy is common in patients with a history of acute coronary syndrome (ACS), and it is associated with adverse cardiovascular outcomes. In this study, researchers aimed to develop a risk score that predicts statin non-adherence using routinely collected data during hospital admission for ACS. The study involved 19,942 patients hospitalised for ACS, and the risk score was based on a multivariable Poisson regression model that identified risk factors associated with the statin Medication Possession Ratio (MPR) 6-18 months after hospital discharge. The results showed that statin non-adherence (MPR <0.8) occurred in 24% of patients. Patients with a history of cardiovascular disease (CVD) who were not taking a statin on ACS admission were more likely to have MPR <0.8 than those with low-density lipoprotein (LDL) cholesterol <2 mmol/L who were taking a statin. Other independent risk factors for non-adherence included age <45 years, female sex, disadvantaged ethnic groups, and no coronary revascularisation during the ACS admission. The risk score, which included nine variables, had a C-statistic of 0.67. Patients in the highest quartile of the risk score had a 45% chance of MPR <0.8, while those in the lowest quartile had a 12% chance. The study concludes that the risk score generated from routinely collected data can identify patients at higher risk of statin non-adherence during follow-up. It suggests that the risk score could be used to target inpatient and outpatient interventions to improve medication adherence. The risk score may help clinicians to identify patients who require additional support to adhere to their medication regimen, such as culturally appropriate education, and digital health services.

A Risk Model to Predict Statin Non-Adherence Following an Acute Coronary Syndrome. Heart, lung & circulation 2023; Liao YB, Lee M, Poppe KK *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36933980

The role of community pharmacist to improve statin adherence in diabetics.

The GulDE-S study evaluated the impact of a community pharmacist intervention on statin adherence in new users with type 2 diabetes (T2D). The study aimed to initiate statin therapy and optimize statin adherence through education, monitoring, and communication with

patients' other healthcare providers. The study involved community pharmacy staff proactively identifying adult patients with T2D who were not prescribed a statin, and patients received individualized education and follow-up and monitoring for one year. Adherence was defined as the proportion of days covered (PDC) by a statin over 12 months. The study found that patients in the intervention group were 21.2% more likely to have PDC of 80% or higher, and the adjusted average PDC was 3.1% higher in the intervention group than the control group. However, the differences were not statistically significant. Several strategies have been found to improve medication adherence, including pharmacist interventions for patients with diabetes and patients taking lipid-lowering medications such as statins. Community pharmacists have an opportunity to deliver medication adherence interventions given that they are highly accessible and have more frequent contact with patients than most other health care providers. The GuIDE-S intervention incorporated evidence-based components that improve medication adherence, such as education, ongoing follow-up, and monitoring and communication with patients' other health care providers. The study has limitations, including the use of pharmacy-based fill data rather than claims data, and pharmacies were not randomized to study arms. Future research should evaluate core adherence intervention components and implementation strategies that optimize fidelity to improve the effect of community pharmacist interventions to improve statin adherence in people with T2D.

Community pharmacist intervention to optimize statin adherence in diabetes care: The GuIDE-S study. Journal of the American Pharmacists Association : JAPhA 2023; Bacci JL, Marcum ZA, Rodriguez P *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36933697

Effect of statins in ACS patients with renal disease – SWEDEHEART registry

The use of statins in patients with chronic kidney disease (CKD) and acute coronary syndromes (ACS) remains controversial. CKD patients may exhibit reduced benefits from statins due to reduced low-density lipoprotein (LDL) levels. A recent study aimed to clarify the gaps in the issue by analysing the outcomes of statin discontinuation in CKD patients during the first year following ACS and comparing the long-term outcomes of high-dose statins versus low-moderate intensity statins. The study analysed data from the Swedish national registry SWEDEHEART, which included 142,962 patients admitted with a first diagnosis of acute myocardial infarction (AMI) between 2005-2016. The study found that the use of high-dose statins in CKD patients reduced the risk of reinfarction, stroke, and all-cause mortality regardless of renal function, compared to low-moderate intensity statins. However, the benefits of high-dose statins were not observed in patients with eGFR <30 mL/min. The study also found that discontinuation rates of statin therapy among kidney function groups were similar, regardless of statin intensity. The study's findings highlight the importance of using statins to improve long-term outcomes in CKD patients with ACS. Despite some limitations, the study suggests that statins have pleiotropic effects, including anti-inflammatory, antioxidant, and endothelial-protective effects, which may reduce the inflammatory burden and improve glomerular hemodynamics. Further clinical studies are needed to clarify the issue, possibly aimed at identifying possible biomarkers of statins action on renal function. The study also suggests a more critical approach to deprescribing and a change in the paradigm regarding the use of statins as life-saving therapy in CKD patients.

Statin therapy after myocardial infarction in patients with renal failure: the longer, the merrier! Journal of cardiovascular pharmacology 2023; Spadafora L, Crimi G, Porto I, Biondi-Zoccai G. http://www.ncbi.nlm.nih.gov/pubmed/?term=36930569

Relevant Publications

1. Association of lipid-lowering agent use and dry eye disease: A nationwide matched case-control study in Taiwan, 2002-2016. Acta ophthalmologica 2023; Chien LN, Chou YI, Tsai YJ *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36942369
2. Polypill Better for Secondary Cardiovascular Prevention Than Physician-Directed Care. American family physician 2023; 107:318-319Ebell MH. http://www.ncbi.nlm.nih.gov/pubmed/?term=36920802
3. Effect of rosuvastatin 20mg versus rosuvastatin 5mg plus ezetimibe on statin side-effects in elderly patients with atherosclerotic cardiovascular disease: Rationale and design of a randomized, controlled SaveSAMS trial. Am Heart J 2023; Cha JJ, Hong SJ, Kim JH *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36934981
4. Characteristics and lipid lowering treatment patterns in patients tested for lipoprotein(a): A real-world US study. Am J Prev Cardiol 2023; 14:100476Hu X, Cristino J, Gautam R *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36936405
5. Statins Restore Endothelial Protection against Complement Activity in Obstructive Sleep Apnea: A Randomized Trial. Ann Am Thorac Soc 2023; Shah R, Patel N, Emin M *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36912897
6. Differential association between apolipoprotein B and LDL cholesterol and cerebral atherosclerosis according to pre-stroke statin use. Atherosclerosis 2023; 371:14-20Baik M, Nam HS, Heo JH *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36966561
7. Investigation of the impact of rosuvastatin and telmisartan in doxorubicin-induced acute cardiotoxicity. Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie 2022; 154:113673Al-Kuraishy HM, Al-Gareeb AI, Alkhuriji AF *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36942604
8. Atorvastatin-pretreated mesenchymal stem cell-derived extracellular vesicles promote cardiac repair after myocardial infarction via shifting macrophage polarization by targeting microRNA-139-3p/Stat1 pathway. BMC Med 2023; 21:96Ning Y, Huang P, Chen G *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36927608
9. Post-diagnostic statin use and breast cancer-specific mortality: a population-based cohort study. Breast Cancer Res Treat 2023; Scott OW, TinTin S, Harborg S *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36930345
10. The role of HMGCR expression in combination therapy of simvastatin and FAC treated locally advanced breast cancer patients. Breast Dis 2023; 42:73-83Yulian ED, Siregar NC, Sudijono B, Hwei LRY. http://www.ncbi.nlm.nih.gov/pubmed/?term=36938720
11. A randomized Phase II Study of Irinotecan Plus Cisplatin with or without Simvastatin in ever Smokers with Extended Disease Small Cell Lung Cancer. Cancer research and treatment : official journal of Korean Cancer Association 2023; Lee Y, Lee SH, Lee GK *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36960628
12. The negative effects of statin drugs on cardiomyocytes: current review of laboratory and experimental data (mini-review). Cardiovasc Hematol Agents Med Chem 2023; Chaulin AM. http://www.ncbi.nlm.nih.gov/pubmed/?term=36918788
13. Comprehensive Management of Acute Ischemic Stroke in Psoriatic Patient. Case reports in dermatological medicine 2023; 2023:6580971Rasyid A, Mesiano T, Kurniawan M *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36936469
14. Sitosterolemia: A Case Report and a Concise Literature Review. Case Rep Endocrinol 2023; 2023:4451595Mahzari MM. http://www.ncbi.nlm.nih.gov/pubmed/?term=36937651
15. Impact of Long-Term Antithrombotic and Statin Therapy on the Clinical Outcome in Patients with Cavernous Malformations of the Central Nervous System: A Single-Center Case Series of 428 Patients. Cerebrovasc Dis 2023:1-9Wildi S, Nager S, Akeret K *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36944322
16. Evaluating the impact of statin use on influenza vaccine effectiveness and influenza infection in older adults. Clin Infect Dis 2023; Chung H, Campitelli MA, Buchan SA *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36942534

17. Functional foods and nutraceuticals in the treatment of hypercholesterolemia: Statement of the Spanish Society of Arteriosclerosis 2023. Clin Investig Arterioscler 2023; Pérez-Martínez P, Ros E, Botet JP *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36932013
18. Coronary artery calcification on routine CT has prognostic and treatment implications for all ages. Clin Radiol 2023; Graby J, Soto-Hernaez J, Murphy D *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36935258
19. Utilization of Hypolipidemic Drugs, Patterns, and Factors Affecting Dyslipidemia Among Type 2 Diabetes Mellitus at a Tertiary Care Teaching Hospital in South India. Cureus 2023; 15:e34748Khot S, Chakraborty A, Vijaykumar S. http://www.ncbi.nlm.nih.gov/pubmed/?term=36909102
20. Triglyceride-rich lipoproteins, remnant-cholesterol, and atherosclerotic cardiovascular disease. Curr Opin Lipidol 2023; Ganda OP. http://www.ncbi.nlm.nih.gov/pubmed/?term=36924359
21. Risk factors of dementia in patients with cerebral vascular diseases based on Taiwan National Health Insurance data. Dement Geriatr Cogn Disord 2023; Zhou B, Lin CL, Kojima S *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36948166
22. The effect of statins on bone turnover biomarkers: a systematic review and meta-analysis of randomized controlled trials. Endocrine journal 2023; Zhao H, Tang Y, Zhen Y *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36928061
23. Statin Intolerance: a Review and Update. Endocrine practice : official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists 2023; Tsushima Y, Hatipoglu B. http://www.ncbi.nlm.nih.gov/pubmed/?term=36958647
24. Regression discontinuity design to evaluate the effect of statins on myocardial infarction in electronic health records. European journal of epidemiology 2023; Odden MC, Zhang A, Jawadekar N *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36935439
25. Trends in Cardiovascular Risk Factors Control Among US Adults by Glycemic Statuses, 2007-2018. Eur J Prev Cardiol 2023; Yuan S, Song C, He J *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36929777
26. Effects of PCSK9 inhibitors on platelet function. EuroIntervention : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology 2023; 18:1215-1217Räber L, Ueki Y. http://www.ncbi.nlm.nih.gov/pubmed/?term=36939108
27. How Low Is Too Low? A Retrospective Analysis of Very Low LDL-C Levels in Veterans. Federal practitioner : for the health care professionals of the VA, DoD, and PHS 2022; 39:e0334Plummer S, Wright M, Brown JM. http://www.ncbi.nlm.nih.gov/pubmed/?term=36923550
28. The association of lipid-lowering therapy and blood pressure control among outpatients with hypertension at the Felege Hiwot Comprehensive Specialized Hospital, Northwest Ethiopia. Frontiers in cardiovascular medicine 2023; 10:1071338Abebe RB, Kebede SA, Birarra MK. http://www.ncbi.nlm.nih.gov/pubmed/?term=36937906
29. Effect of polymorphisms in drug metabolism and transportation on plasma concentration of atorvastatin and its metabolites in patients with chronic kidney disease. Frontiers in pharmacology 2023; 14:1102810Jiang Z, Wu Z, Liu R *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36923356
30. Effect of the chronic medication use on outcome measures of hospitalized COVID-19 patients: Evidence from big data. Frontiers in public health 2023; 11:1061307Malekpour MR, Abbasi-Kangevari M, Shojaee A *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36908454
31. Effect of statins on the age of onset of age-related macular degeneration. Graefe's archive for clinical and experimental ophthalmology = Albrecht von Graefes Archiv fur klinische und experimentelle Ophthalmologie 2023; Ganesh D, Chiang JN, Corradetti G *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36917316
32. Disparate statin prescribing following hospital discharge for stroke or transient ischemic attack: Findings from COMPASS. J Am Geriatr Soc 2023; Cummings DM,

Jones S, Bushnell C *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36929311
33. Achievement Rates for Low-Density Lipoprotein Cholesterol Goals in Patients at High Risk of Atherosclerotic Cardiovascular Disease in a Real-World Setting in Japan. J Atheroscler Thromb 2023; Mitani H, Suzuki K, Ako J *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36928267
34. Approach to the Patient with a Suboptimal Statin Response: Causes and Algorithm for Clinical Management. J Clin Endocrinol Metab 2023; Sun L, Wolska A, Amar M *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36929838
35. The importance of low-density lipoprotein cholesterol measurement and control as performance measures: A joint Clinical Perspective from the National Lipid Association and the American Society for Preventive Cardiology. J Clin Lipidol 2023; 17:208-218Virani SS, Aspry K, Dixon DL *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36965958
36. Clinical and Radiological Features of Korean Patients With Anti-HMGCR Myopathy. Journal of clinical neurology (Seoul, Korea) 2023; Oh EK, Lee SA, Lee HJ *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36929062
37. Genetics, Safety, Cost-Effectiveness, and Accessibility of Injectable Lipid-Lowering Agents: A Narrative Review. Journal of lipids 2023; 2023:2025490Sindi AAA. http://www.ncbi.nlm.nih.gov/pubmed/?term=36935878
38. The impact of statin therapy on in-hospital prognosis and endothelial function of patients at high-to-very high cardiovascular risk admitted for COVID-19: Statins, endothelial function, and COVID-19 outcomes. Journal of medical virology 2023; Bianconi V, Mannarino MR, Cosentini E *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36929742
39. Prescription of statins after acute coronary syndrome; a single-centre observational study. JPMA. The Journal of the Pakistan Medical Association 2023; 73:646-649Mahmood MM, Nawaz MJ. http://www.ncbi.nlm.nih.gov/pubmed/?term=36932772
40. Continuity of CVD treatment during the COVID-19 pandemic: evidence from East Java, Indonesia. J Pharm Policy Pract 2023; 16:50Dewi A, Pisani E, Ihsan BRP *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36949533
41. Vascular Quality Initiative Assessment of Compliance with Society for Vascular Surgery Clinical Practice Guidelines on the Management of Extracranial Cerebrovascular Disease. Journal of vascular surgery 2023; Marcaccio CL, AbuRahma AF, Eldrup-Jorgensen J *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36948279
42. Highlights From the American College of Cardiology's 2023 Scientific Session: the Ketogenic Diet and Cardiac Events, a Wearable Sensor to Predict Troponin Levels, Bempedoic Acid for Statin Intolerance, and More. Jama 2023; Suran M. http://www.ncbi.nlm.nih.gov/pubmed/?term=36939739
43. Prevalence of Statin Use for Primary Prevention of Atherosclerotic Cardiovascular Disease by Race, Ethnicity, and 10-Year Disease Risk in the US: National Health and Nutrition Examination Surveys, 2013 to March 2020. JAMA cardiology 2023; Jacobs JA, Addo DK, Zheutlin AR *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36947031
44. Safety and Efficacy of Topical Lovastatin Plus Cholesterol Cream vs Topical Lovastatin Cream Alone for the Treatment of Disseminated Superficial Actinic Porokeratosis: A Randomized Clinical Trial. JAMA dermatology 2023; Santa Lucia G, Snyder A, Lateef A *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36947042
45. Rosuvastatin adjunctive therapy for rifampicin-susceptible pulmonary tuberculosis: a phase 2b, randomised, open-label, multicentre trial. Lancet Infect Dis 2023; Cross GB, Sari IP, Kityo C *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36966799
46. The polypill from a public-health perspective. Lancet neurology 2023; 22:294-295Feigin VL, Brainin M, Martins SCO. http://www.ncbi.nlm.nih.gov/pubmed/?term=36931800
47. The association between statin use and prognosis in esophageal cancer patients: A meta-analysis. Medicine (Baltimore) 2023; 102:e33359Lv J, Chen P, Wu J *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36961185
48. Network Analysis Reveals the Molecular Bases of Statin Pleiotropy That Vary with Genetic Background. Microbiol Spectr 2023:e0414822Del Rio Hernandez CE,

Campbell LJ, Atkinson PH, Munkacsi AB. http://www.ncbi.nlm.nih.gov/pubmed/?term=36946734
49. Additive Therapy of Plasmodium berghei-Induced Experimental Cerebral Malaria via Dihydroartemisinin Combined with Rapamycin and Atorvastatin. Microbiol Spectr 2023:e0231722Song X, Cheng W, Zhu H *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36946739
50. Bempedoic acid prevents cardiovascular events in statin-intolerant patients. Nat Rev Cardiol 2023; Lim GB. http://www.ncbi.nlm.nih.gov/pubmed/?term=36944785
51. [How to cope with the nocebo effects of statins?]. Ned Tijdschr Geneeskd 2023; 167Lafeber M, Evers AWM, Klok FA. http://www.ncbi.nlm.nih.gov/pubmed/?term=36920298
52. Statins and Left Ventricular Ejection Fraction Following Doxorubicin Treatment. NEJM Evid 2022; 1Hundley WG, D'Agostino R, Jr., Crotts T *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36908314
53. Statins and risk of venous thromboembolic diseases: A two-sample mendelian randomization study. Nutrition, metabolism, and cardiovascular diseases : NMCD 2023; Ma XS, Sun J, Geng R *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36958971
54. Effect of nimodipine combined with atorvastatin calcium on microinflammation and oxidative stress levels in patients with cerebral vasospasm after subarachnoid hemorrhage. Pak J Med Sci 2023; 39:434-438Gan N, Jia TL, Tian N *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36950409
55. Statin Persistence and Adherence among Older Initiators: A Nationwide Cohort Study Using the National Health Insurance Claims Database in Japan. Pharmacoepidemiol Drug Saf 2023; Tomida J, Yoshida T, Senda S *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36960485
56. Lipid lowering combination therapy: From prevention to atherosclerosis plaque treatment. Pharmacol Res 2023; 190:106738Masana L, Plana N, Andreychuk N, Ibarretxe D. http://www.ncbi.nlm.nih.gov/pubmed/?term=36940892
57. A pharmacokinetic drug-drug interaction study between rosuvastatin and emvododstat, a potent anti-SARS-CoV-2 (COVID-19) DHODH (dihydroorotate dehydrogenase) inhibitor. Pharmacol Res Perspect 2023; 11:e01076Morton TL, Laskin OL, Kaushik D *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36938928
58. Statin-use and perceptions of high cholesterol as predictors of healthy lifestyle behaviours in Nigerians. PLOS Glob Public Health 2022; 2:e0000190Coker JF, Hill KM, Otu AA, House A. http://www.ncbi.nlm.nih.gov/pubmed/?term=36962358
59. The availability of essential medicines for cardiovascular diseases at healthcare facilities in low- and middle-income countries: The case of Bangladesh. PLOS Glob Public Health 2022; 2:e0001154Hakim S, Chowdhury MAB, Haque MA *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36962886
60. Influence of rosuvastatin on apolipoproteins and coagulation factor levels: Results from the STAtin Reduce Thrombophilia trial. Research and practice in thrombosis and haemostasis 2023; 7:100063Camilleri E, van Rein N, van Vlijmen BJM *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36923709
61. Statin protects men but not women with HIV against loss of muscle mass, strength, and physical function: a pilot study. Scientific reports 2023; 13:4693Cárdenas JDG, Oliveira VHF, Borsari AL *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36949103
62. Cardiovascular disease preventive effects of aspirin combined with different statins in the United States general population. Scientific reports 2023; 13:4585Liu T, Zuo R, Wang J *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36941404
63. Statin treatment and the alterations in the platelet lipidome: What is the impact of Lipid Profile on Thrombosis? Thrombosis and haemostasis 2023; Goto S, Goto S. http://www.ncbi.nlm.nih.gov/pubmed/?term=36913974
64. [Rosuvastatin acts on the lymphatic system to improve atherosclerosis]. Zhonghua xin xue guan bing za zhi 2023; 51:288-295Song ZQ, Song JX, Cui YX *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36925139

Basic Science

1. **Topical Cholesterol and Statin Formulation to Treat Porokeratosis. Actas Dermosifiliogr 2023; Gimeno Castillo J, De la Torre Gomar FJ. http://www.ncbi.nlm.nih.gov/pubmed/?term=36925100**
2. **Micellar eco-friendly HPLC method for simultaneous analysis of ternary combination of aspirin, atorvastatin and ramipril: application to content uniformity testing. BMC Chem 2023; 17:19Abdallah NA, El-Brashy AM, Ibrahim FA, El-Awady MI. http://www.ncbi.nlm.nih.gov/pubmed/?term=36922850**
3. **Targeting the mevalonate pathway suppresses ARID1A-inactivated cancers by promoting pyroptosis. Cancer cell 2023; Zhou W, Liu H, Yuan Z *et al.* http://www.ncbi.nlm.nih.gov/pubmed/?term=36963401**
4. **A New method for simultaneous qualitative and quantitative determination of amlodipine besylate and atorvastatin calcium in bulk and pharmaceutical formulations using transmission FT-IR spectroscopy. Heliyon 2023; 9:e14189Ibesh S, Bitar Y, Trefi S. http://www.ncbi.nlm.nih.gov/pubmed/?term=36938441**
5. **Multicomponent spectrophotometric determination of a ternary mixture of widely-prescribed cardiovascular drugs by four different methods. Spectrochimica acta. Part A, Molecular and biomolecular spectroscopy 2023; 295:122573El-Awady MI, El-Brashy AM, Abdallah NA, Ibrahim FA. http://www.ncbi.nlm.nih.gov/pubmed/?term=36921519**

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