



Update week 15 & 16 - 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

---

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

For live updates you can follow me on twitter

---

## Key Publications

1. **QRiskLifetime score underestimates life time risk**
2. **Implementing current LDL-c targets; can we (not) afford it**
3. **DAPT Stat for ischemic stroke**
4. **ASCVD and chronic liver disease a lethal combo, can statins address bot?**
5. **Consensus paper on on statin loading pre-PCI**

---

### Underestimation of Lifetime risk in QRiskLifetime risk score

This study aimed to externally validate the QRiskLifetime cardiovascular disease (CVD) risk prediction tool using a 10-year time horizon. While the tool displayed excellent discrimination in the whole population, its performance varied when stratified by age-group, with moderate to poor results. The study revealed that QRiskLifetime under-predicts 10-year CVD risk in almost all age-groups, implying a likely underestimation of lifetime risk as well. The study's key limitations include the short follow-up period, as lifetime risk prediction is more challenging without lifetime follow-up data. Additionally, the high proportion of people with missing data and potential incorrect assumptions regarding data being missing at random could affect the results. The study does not account for the fact that younger people at high risk of premature CVD often do not have a 10-year CVD risk exceeding current treatment thresholds. Moreover, the assumption that future risk in younger individuals will remain consistent with current risk in older individuals is a strong one, given the changing landscape of CVD risk factors. The study highlights the need for better data linkage, increased access to whole population data, and the development of new prediction tools that account for competing mortality risks.

**External validation of the QLifetime cardiovascular risk prediction tool: population cohort study.** *BMC Cardiovasc Disord* 2023; 23:194 Livingstone S, Morales DR, Fleuriot J *et al.*

## **The price of (not) implementing LDL guideline recommendations**

The article discusses the potential benefit of implementing guideline-recommended cholesterol-lowering therapy in patients with atherosclerotic cardiovascular disease (ASCVD) following a myocardial infarction (MI) hospitalization. The authors used simulations to estimate the percentage of recurrent ASCVD events that could be prevented if all patients received recommended therapy. The study found that only 27.3% of patients were receiving guideline-recommended therapy, representing a missed opportunity to reduce the recurrence of ASCVD events in this high-risk population. If all patients were to receive recommended therapy, the authors estimated that 21.6% of recurrent ASCVD events could be prevented over 3-5 years, indicating that population-wide implementation of recommended therapy has the potential to substantially reduce the burden of recurrent ASCVD events. One of the weak points of the study is that the data used to estimate the effectiveness of guideline-recommended therapy was derived from trials of statins, ezetimibe, and PCSK9i. The study did not take into account potential side effects of these medications or patient preferences, which could impact the effectiveness of guideline-recommended therapy in real-world settings. Additionally, the study used data from a limited timeframe, which may not fully capture the current status of guideline adherence. Last but certainly not least, the study did not examine the potential cost implications of implementing guideline-recommended therapy, which could be prohibitive and limit its feasibility in practice.

**Recurrent Atherosclerotic Cardiovascular Disease Events Potentially Prevented with Guideline-Recommended Cholesterol-Lowering Therapy following Myocardial Infarction.**

Cardiovasc Drugs Ther 2023; Sakhuja S, Bittner VA, Brown TM *et al.*

<http://www.ncbi.nlm.nih.gov/pubmed/?term=37052867>

## **DAPT - Stat in acute ischemic stroke, a new effective, and safe combo**

This study compares the safety and efficacy of long-term dual antiplatelet therapy (DAPT) and intensive rosuvastatin with short-term DAPT for acute ischemic stroke (AIS). While the study found that intensive rosuvastatin with short-term DAPT was equivalent in reducing the risk of recurrent ischemic stroke, alleviated symptoms more rapidly, and significantly reduced the risk of bleeding without causing an increase in transaminase or muscle enzymes, there are several weak points in the research. Firstly, the study is limited by its single-center, small sample size (220 patients) which may affect the generalizability of the results. Secondly, the patients were divided into control and study groups on a voluntary basis, which could introduce selection bias. This incompletely randomized and controlled design also prevents definitive conclusions about the true efficacy and safety of the compared treatments. Additionally, the study lacks a hierarchical analysis based on different stroke types, which could provide a more nuanced understanding of the treatment effects for specific patient populations. In conclusion, while the study presents interesting findings, its limitations call for further research with larger sample sizes, randomized controlled designs, and stratified analysis based on stroke types to validate and expand upon these initial results.

**A comparison of safety and efficacy between long-term DAPT and intensive statins combined with short-term DAPT for acute ischemic stroke.** European journal of medical research 2023; 28:154 Deng T, Liu X, He W *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37081514>

## **“Killing” two birds with a statin?**

The study "High-Intensity Statin Reduces the Risk of Mortality Among Chronic Liver Disease Patients With Atherosclerotic Cardiovascular Disease: A Population-Based Cohort Study" examines the relationship between statin intensity and mortality in patients with chronic liver disease (CLD) and atherosclerotic cardiovascular disease (ASCVD). The study's results indicate that high-intensity statin is associated with a lower risk of mortality and cardiovascular-related mortality in patients with CLD and ASCVD. The study concludes that high-intensity statins should be used in patients with CLD and ASCVD for secondary

prevention of ASCVD, and the potential benefits of optimal intensity use should be demonstrated. First, as a nonrandomized study, the results may be affected by residual and unmeasured confounding factors, which the study attempts to address using various methodologies but may not have fully resolved. Second, the study uses an intention-to-treat design, which does not account for potential discontinuation or change in statin intensity for medical reasons, such as increased liver enzyme levels. Third, the study does not include information on the specific status or condition of CLD, such as Child-Pugh score or MELD score, which could affect the patients' prognosis. Fourth, the study's population excludes certain patients with atherosclerotic cardiovascular disease, such as those with MI, stroke, and peripheral artery disease. Lastly, patients with mild stage nonalcoholic fatty liver disease are not included, and further studies including this population are needed. In summary, although the study provides valuable insights, these limitations should be taken into account when interpreting the results

**High-Intensity Statin Reduces the Risk of Mortality Among Chronic Liver Disease Patients With Atherosclerotic Cardiovascular Disease: A Population-Based Cohort Study.** *J Am Heart Assoc* 2023; 12:e028310 Bea S, Oh IS, Kim JH *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37066797>

### **Italian consensus paper on pre-pci statin loading**

This expert opinion paper from the Interventional Cardiology Working Group of the Italian Society of Cardiology discusses lipid-lowering therapy (LLT) management in patients with coronary artery disease undergoing percutaneous coronary interventions (PCIs) in Italy. Despite advances in interventional cardiology, patients remain at high risk of developing recurrent cardiovascular events after PCIs. Several observational studies have shown suboptimal low-density lipoprotein cholesterol (LDL-C) control, poor adherence to statin therapy, and underutilization of high-intensity statins, ezetimibe, and proprotein convertase subtilisin/kexin type 9 inhibitors in real-world clinical practice. Early intensive LLT has been found to stabilize atheromatous plaque and increase fibrous cap thickness in patients with acute coronary syndrome. The paper's weak points include a focus on Italian reimbursement policies and regulations, which may limit its applicability to other countries. Additionally, there is a gap in addressing patients with LDL-C levels between 55 and 70 mg/dl who cannot benefit from PCSK9i therapy in Italy. The long-term adherence issue with statin therapy is another area of concern that remains unresolved. The paper also discusses gene silencing strategies as a potential frontier in treating dyslipidemia, but more research is needed to confirm their safety, tolerability, and efficacy. Overall, the paper highlights the importance of early intensive LLT and the need to address gaps in treatment and adherence for better long-term outcomes.

**Lipid-lowering therapy in patients with coronary artery disease undergoing percutaneous coronary interventions in Italy: an expert opinion paper of Interventional Cardiology Working Group of Italian Society of Cardiology.** *Journal of cardiovascular medicine (Hagerstown, Md.)* 2023; 24:e86-e94 Calabrò P, Spaccarotella C, Cesaro A *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37052225>

---

## **Relevant Publications**

1. Programa de diabetes: improving diabetes care for undocumented immigrants using the Chronic Care Model at a free community clinic. *Acta diabetologica* 2023; Leining MG, Zhou X, Yenokyan G *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37036509>
2. Coronary microcirculatory dysfunction in hypercholesterolemic patients with COVID-19: potential benefit from cholesterol-lowering treatment. *Annals of medicine* 2023; 55:2199218 Vuorio A, Kovanen PT, Raal FJ. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37068045>

3. BEST MEDICAL TREATMENT IN PATIENTS WITH ASYMPTOMATIC CAROTID STENOSIS: MYTH OR REALITY? Annals of vascular surgery 2023; Constâncio Oliveira V, Oliveira P, Silva E *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37088360>
4. Understanding the molecular mechanisms of statin pleiotropic effects. Archives of toxicology 2023;1-17German CA, Liao JK. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37084080>
5. LDL cholesterol targets rarely achieved in familial hypercholesterolemia patients: A sex and gender-specific analysis. Atherosclerosis 2023; Schreuder MM, Hamkour S, Siegers KE *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37080805>
6. Bempedoic acid lowers high-sensitivity C-reactive protein and low-density lipoprotein cholesterol: Analysis of pooled data from four phase 3 clinical trials. Atherosclerosis 2023; 373:1-9Stroes ESG, Bays HE, Banach M *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37075696>
7. Statin Use in Myelodysplastic Syndromes Is Associated with a Better Survival and Decreased Progression to Leukemia. Blood Adv 2023; Afzal A, Fiala MA, Jacoby MA, Walter MJ. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37042968>
8. Lipids and transaminase elevations in ARV-experienced PLWH switching to a doravirine-based regimen from rilpivirine or other regimens. BMC infectious diseases 2023; 23:227Maggi P, Ricci ED, Cicalini S *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37059996>
9. Cardiovascular risk factors and adherence to Cardiovascular Protection Practice Guidelines in adults with type 1 diabetes: A BETTER Registry cross-sectional analysis. Canadian journal of diabetes 2023; Madar H, Lalanne-Mistrih ML, Lebbar M *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37059389>
10. Statins enhances antitumor effect of oxaliplatin in KRAS-mutated colorectal cancer cells and inhibits oxaliplatin-induced neuropathy. Cancer Cell Int 2023; 23:73Tsubaki M, Takeda T, Matsuda T *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37069612>
11. Phase I Study of a Combination of Fluvastatin and Celecoxib in Children with Relapsing/Refractory Low-Grade or High-Grade Glioma (FLUVABREX). Cancers 2023; 15Leblond P, Tresch-Bruneel E, Probst A *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37046681>
12. Effect of high-intensity statin therapy on atherosclerosis (IBIS-4): Manual versus automated methods of IVUS analysis. Cardiovascular revascularization medicine : including molecular interventions 2023; Bass RD, García-García HM, Ueki Y *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37087308>
13. Letter by Zhou *et al* Regarding Article, "Long-Term Evolocumab in Patients With Established Atherosclerotic Cardiovascular Disease". Circulation 2023; 147:1256-1257Zhou X, Sun P, Yang Q. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37068131>
14. Prevalence of Statin Use and Predictors of Statin Initiation Among Patients with Alcohol-Related Cirrhosis - A Danish Nationwide Cohort Study. Clinical epidemiology 2023; 15:435-446Ramsing MS, Kraglund F, Jepsen P. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37033124>
15. Do statins decrease vascular inflammation in patients at risk for large-vessel vasculitis? A retrospective observational study with FDG-PET/CT in polymyalgia rheumatica, giant cell arteritis and fever of unknown origin. Clinical and experimental rheumatology 2023; 41:812-820Iannuzzi F, Hysa E, Camellino D *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37073635>
16. Suboptimal lipid management in patients with acute ischemic stroke. Clin Neurosurg 2023; 229:107717Vandewalle L, Duchi F, Verhelle K, Vanacker P. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37079961>
17. Statin Utilization Among Individuals Infected With Hepatitis C Virus: A Retrospective Cohort Study. Cureus 2023; 15:e36049Goble SR, Nyembo P, Rodin H *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37056557>
18. Highlights of Cardiovascular Disease Prevention Studies Presented at the 2023 American College of Cardiology Conference. Curr Atheroscler Rep 2023; Gupta K, Balachandran I, Foy J *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37086374>

19. Impact of Statin or Fibrate Therapy on Homocysteine Concentrations: A Systematic Review and Meta-Analysis. Curr Med Chem 2023; Akbari A, Islampanah M, Arhaminiya H *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37069715>
20. Optimal statin use for prevention of sepsis in type 2 diabetes mellitus. Diabetology & metabolic syndrome 2023; 15:75Sun M, Tao Y, Chen WM *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37072863>
21. Effectiveness and Safety of a Fixed-Dose Combination of Valsartan and Rosuvastatin (Rovatitan(®) Tablet) in Patients with Concomitant Hypertension and Hyperlipidemia: An Observational Study. Drug design, development and therapy 2023; 17:1047-1062Lee KJ, Ryu JK, Cho YH *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37051292>
22. Statin loading before coronary artery bypass grafting: a randomized trial. Eur Heart J 2023; Liakopoulos OJ, Kuhn EW, Hellmich M *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37086268>
23. Benefit of icosapent ethyl on coronary physiology assessed by computed tomography angiography fractional flow reserve: EVAPORATE-FFRCT. European heart journal cardiovascular Imaging 2023; Rabbat MG, Lakshmanan S, Benjamin MM *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37082990>
24. Prescribing patterns of statins and associated factors among type 2 diabetes mellitus patients attended at Jugol General Hospital in eastern Ethiopia: A cross-sectional study. Front Clin Diabetes Healthc 2023; 4:1061628Nigussie S, Demeke F. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37034477>
25. The effect of intensive statin therapy in non-symptomatic intracranial arteries: The STAMINA-MRI sub-study. Frontiers in neurology 2023; 14:1069502Sim JE, Song HN, Choi JU *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37056360>
26. Risk of recurrent cardiovascular events in coronary artery disease patients with Type D personality. Front Psychol 2023; 14:1119146Torgersen KS, Sverre ECB, Weedon-Fekjær H *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37057178>
27. [Prevalence of metabolic syndrome : Analysis based on routine statutory health insurance data]. Inn Med (Heidelb) 2023; Schütte S, Eberhard S, Burger B *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37058154>
28. Reduced High-Density Lipoprotein Cholesterol Is an Independent Determinant of Altered Bone Quality in Women with Type 2 Diabetes. Int J Mol Sci 2023; 24Dule S, Barchetta I, Cimini FA *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37047445>
29. Is statin therapy after ischaemic stroke associated with increased intracerebral hemorrhage? The association may be dependent on intensity of statin therapy. Int J Stroke 2023;17474930231172623Yang R, Wu J, Yu H *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37070670>
30. Familial Hypercholesterolemia: Challenges for a High-Risk Population: JACC Focus Seminar 1/3. J Am Coll Cardiol 2023; 81:1621-1632Choi D, Malick WA, Koenig W *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37076217>
31. Clinical Trial Design for Triglyceride-Rich Lipoprotein-Lowering Therapies: JACC Focus Seminar 3/3. J Am Coll Cardiol 2023; 81:1646-1658Malick WA, Waksman O, Do R *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37076219>
32. Pragmatic evaluation of events and benefits of lipid lowering in older adults (PREVENTABLE): Trial design and rationale. J Am Geriatr Soc 2023; Joseph J, Pajewski NM, Dolor RJ *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37082807>
33. Hyperlipidemia management: A calibrated approach. The Journal of family practice 2023; 72:126-132Firnhaber JM. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37075215>
34. Association of RASis and HMG-CoA reductase inhibitors with clinical manifestations in coronavirus disease 2019 patients: Results from the Khorshid Coronavirus Disease Cohort Study. Journal of research in medical sciences : the official journal of Isfahan University of Medical Sciences 2023; 28:15Iraj B, Moravejolahkami AR, Sami R *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37064792>
35. Moderate-Intensity Rosuvastatin Plus Ezetimibe Versus High-Intensity Rosuvastatin for Target Low-Density Lipoprotein Cholesterol Goal Achievement in Patients With Recent Ischemic Stroke: A Randomized Controlled Trial. J Stroke 2023; Hong KS, Bang OY, Park JH *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37032475>

36. Statin Use During Concurrent Chemoradiotherapy with Improved Survival Outcomes in Esophageal Squamous Cell Carcinoma: A Propensity Score Matched Nationwide Cohort Study. J Thorac Oncol 2023; Chen WM, Yu YH, Chen M *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37085031>
37. Urgent Endarterectomy for Symptomatic Carotid Occlusion is Associated with a High Mortality. Journal of vascular surgery 2023; Schlacter JA, Ratner M, Siracuse J *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37076104>
38. A rare case of punctate porokeratosis treated with topical lovastatin/cholesterol. JAAD case reports 2023; 35:57-59 Ryan C, Bennett R, Davis M *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37078016>
39. Moderate Exercise Safe for People With Statin-Induced Muscle Pain. Jama 2023; Harris E. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37043246>
40. Association of Statin Use With Cancer- and Noncancer-Associated Survival Among Patients With Breast Cancer in Asia. JAMA network open 2023; 6:e239515 Chang WT, Lin HW, Lin SH, Li YH. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37083661>
41. Microbiota-derived tryptophan catabolites mediate the chemopreventive effects of statins on colorectal cancer. Nat Microbiol 2023; Han JX, Tao ZH, Wang JL *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37069401>
42. Women with type 2 diabetes have LDL cholesterol levels higher than those of men, regardless of their treatment and their cardiovascular risk level. Nutrition, metabolism, and cardiovascular diseases : NMCD 2023; Paquet S, Sassenou J, Ringa V *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37088650>
43. Advanced lipoprotein profile identifies atherosclerosis better than conventional lipids in type 1 diabetes at high cardiovascular risk. Nutrition, metabolism, and cardiovascular diseases : NMCD 2023; Serés-Noriega T, Ortega E, Giménez M *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37088651>
44. Survival Analysis of 1140 Patients with Biliary Cancer and Benefit from Concurrent Renin-Angiotensin Antagonists, Statins, or Aspirin with Systemic Therapy. Oncologist 2023; Gunchick V, McDevitt RL, Choi E *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37036699>
45. Association between statin use and risk of gallstone disease and cholecystectomy: a meta-analysis of 590,086 patients. PeerJ 2023; 11:e15149 Chang Y, Lin HM, Chi KY *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37051411>
46. Designing a Multilevel Strategy to Enhance Secondary Prevention of Heart Disease. The Permanente journal 2023; 1-5 Tenner K, Rao A, Dvorkis Y *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37074097>
47. Fabrication and Assessment of Orodispersible Tablets Loaded with Cubosomes for the Improved Anticancer Activity of Simvastatin against the MDA-MB-231 Breast Cancer Cell Line. Polymers (Basel) 2023; 15 Zaki RM, El Sayeh Abou El Ela A, Almurshedi AS *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37050387>
48. Statin and mortality in COVID-19: a systematic review and meta-analysis of pooled adjusted effect estimates from propensity-matched cohorts. Postgraduate medical journal 2022; 98:503-508 Zein A, Sulistiyana CS, Khasanah U *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37066505>
49. Associations between education level, blood-lipid measurements and statin treatment in a Danish primary health care population from 2000 to 2018. Scand J Prim Health Care 2023; 1-9 Fløge MM, Kriegbaum M, Jørgensen H *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37036064>
50. The association between platelet reactivity and lipoprotein levels in Framingham Heart Study participants. Thrombosis research 2023; 225:103-109 Nkambule BB, Chan MV, Lachapelle AR *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37062119>
51. Dosing of basic pharmacotherapy and its effect on the prognosis of patients hospitalized for heart failure. Vnitř Lek 2023; 69:109-118 Krynský T, Mayer O, Jr., Bruthans J *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37072269>
52. EFFICACY OF COMPREHENSIVE TREATMENT OF NONALCOHOLIC FATTY LIVER DISEASE IN PATIENTS WITH PREDIABETES. Wiadomości lekarskie (Warsaw, Poland : 1960) 2023; 76:581-585 Ivachevska VV, Ivachevskiy MM, Hechko MM *et al.*  
<http://www.ncbi.nlm.nih.gov/pubmed/?term=37057783>

---

# Basic Science

1. Nanostructured Lipid Carrier-Based Gel for Repurposing Simvastatin in Localized Treatment of Breast Cancer: Formulation Design, Development, and In Vitro and In Vivo Characterization. *AAPS PharmSciTech* 2023; 24:106Kumbhar PS, Manjappa AS, Shah RR *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37085596>
2. Preferential Solvation Study of Rosuvastatin in the {PEG400 (1) + Water (2)} Cosolvent Mixture and GastroPlus Software-Based In Vivo Predictions. *ACS omega* 2023; 8:12761-12772Hussain A, Afzal O, Yasmin S *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37065087>
3. Aligned lovastatin-loaded electrospun nanofibers regulate collagen organization and reduce scar formation. *Acta biomaterialia* 2023; Chen Z, Xiao L, Hu C *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37075962>
4. In silico and in vitro assessment of anti-Trypanosoma cruzi efficacy, genotoxicity and pharmacokinetics of pentasubstituted pyrrolic Atorvastatin-aminoquinoline hybrid compounds. *Acta tropica* 2023:106924Araujo-Lima CF, Carvalho RCC, Peres RB *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37037291>
5. High-Throughput Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry Method Validation for the Estimation of Atorvastatin and Active Metabolites in Human Plasma. *Assay and drug development technologies* 2023; 21:110-125Agrawal N, Mittal A. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37036476>
6. Therapeutic extracellular vesicle production is substantially increased by inhibition of cellular cholesterol biosynthesis. *Biotechnology and bioengineering* 2023; Martin S, McConnell R, Harrison R *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37060550>
7. Caffeine supplementation and FOXM1 inhibition enhance the antitumor effect of statins in neuroblastoma. *Cancer research* 2023; Tran GB, Ding J, Ye B *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37057874>
8. Simvastatin attenuates glucocorticoid-induced human trabecular meshwork cell dysfunction via YAP/TAZ inactivation. *Current eye research* 2023:1-43Yoo H, Singh A, Li H *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37083467>
9. Atorvastatin and ezetimibe protect against hypercholesterolemia-induced lung oxidative stress, inflammation, and fibrosis in rats. *Frontiers in medicine* 2022; 9:1039707Seenak P, Kumphune S, Prasitsak T *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37082028>
10. New insights on mode of action of vasorelaxant activity of simvastatin. *Inflammopharmacology* 2023; Verma K, Shukla R, Dwivedi J *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37038017>
11. Effects of Mineralocorticoid Receptor Blockade and Statins on Kidney Injury Marker 1 (KIM-1) in Female Rats Receiving L-NAME and Angiotensin II. *Int J Mol Sci* 2023; 24Huang J, Caliskan Guzelce E, Gholami SK *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37047470>
12. Atorvastatin Can Modulate DNA Damage Repair in Endothelial Cells Exposed to Mitomycin C. *Int J Mol Sci* 2023; 24Sinitzky M, Asanov M, Sinitzskaya A *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37047754>
13. Micellar liquid chromatography as a sustainable tool to quantify three statins in oral solid dosage forms. *J Chromatogr A* 2023; 1698:464000García-López L, Peris-Vicente J, Bose D *et al.* <http://www.ncbi.nlm.nih.gov/pubmed/?term=37086546>
14. Statins synergize with phosphodiesterase type 5 inhibitors but not with selective estrogen receptor modulators to prevent myofibroblast transformation in an in vitro model of Peyronie's disease. *The journal of sexual medicine* 2023; Ilg MM, Ralph DJ, Celtek S. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37082866>
15. Atropostatin: Design and Total Synthesis of an Atropisomeric Lactone-Atorvastatin Prodrug. *Molecules (Basel, Switzerland)* 2023; 28Pecorari D, Mazzanti A, Mancinelli

M. <http://www.ncbi.nlm.nih.gov/pubmed/?term=37049939>

16. Lovastatin promotes the self-renewal of murine and primate spermatogonial stem cells. *Stem cell reports* 2023; 18:969-984 Li C, Yao Z, Ma L et al.

<http://www.ncbi.nlm.nih.gov/pubmed/?term=37044069>

To subscribe to the Statin Literature Update Service Click [HERE](#)

---



Facebook



Twitter



Website

**mailing address:**

[lansberg@gmail.com](mailto:lansberg@gmail.com)

© P.J. Lansberg