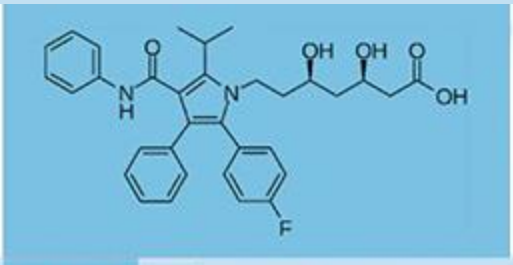
IAS STATIN NEWSLETTER



INTERNATIONAL ATHEROSCLEROSIS SOCIETY

A CURATED WEEKLY UPDATE OF ALL STATIN PUBLICATIONS

Update - June 2021

**Curated by Peter Lansberg,
a Dutch lipidologist and educator, and
reviewed by prof. Philip Barter, Past President of the
International Atherosclerosis Society.**

The IAS statin literature update will keep you up-to-date with all recent statin publications, using a curated approach to select relevant articles.

Statin pubblications June 2021

Add on treatments

1. Ronsein GE, Vaisar T, Davidson WS *et al.* Niacin Increases Atherogenic Proteins in High-Density Lipoprotein of Statin-Treated Subjects. Arterioscler Thromb Vasc Biol 2021; 41:2330-2341. http://www.ncbi.nlm.nih.gov/pubmed/?term=34134520
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3. Sjuls S, Jensen U, Littmann K *et al.* Effective cholesterol lowering after myocardial infarction in patients with nephrotic syndrome may require a multi-pharmacological approach: a case report. European heart journal. Case reports 2021; 5:ytab151. http://www.ncbi.nlm.nih.gov/pubmed/?term=34124564

4. Boutari C, Karagiannis A, Athyros VG. Rosuvastatin and ezetimibe for the treatment of dyslipidemia and hypercholesterolemia. Expert Rev Cardiovasc Ther 2021:1-6. http://www.ncbi.nlm.nih.gov/pubmed/?term=34102931
5. Cheung DWS, Koon JCM, Wong PH *et al.* Combination of atorvastatin or hydrochlorothiazide/amlodipine with Salvia miltiorrhiza (Danshen) and Pueraria lobata (Gegen) for atherosclerosis, hyperlipidaemia, and hypertension: a preclinical in vivo study (abridged secondary publication). Hong Kong medical journal = Xianggang yi xue za zhi 2021; 27 Suppl 2:18-22. http://www.ncbi.nlm.nih.gov/pubmed/?term=34075886
6. Kwon GE, Hyun MH, Byun DJ *et al.* Metabolic signatures of cholesterol biosynthesis and absorption in patients with coronary artery disease. J Steroid Biochem Mol Biol 2021; 212:105940. http://www.ncbi.nlm.nih.gov/pubmed/?term=34119628
7. Zhang L, Wang J, Xu Q *et al.* Influences of tirofiban combined with atorvastatin on coronary blood flow restoration and changes in inflammatory factors, Cys-C, Hcy and MMP-9 in AMI patients after PCI. Minerva medica 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34142775
8. Grgurević D, Grgurević J, Vrca VB *et al.* Incidence of potential drug interactions in co-prescription of statins and macrolide antibiotics in Croatia during the 14 year period. Pharmazie 2021; 76:272-278. http://www.ncbi.nlm.nih.gov/pubmed/?term=34078522

Adherence

1. Talic S, Marquina C, Ofori-Asenso R *et al.* Switching, Persistence and Adherence to Statin Therapy: a Retrospective Cohort Study Using the Australian National Pharmacy Data. Cardiovasc Drugs Ther 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34097194
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3. Maddison R, Jiang Y, Stewart R *et al.* An Intervention to Improve Medication Adherence in People With Heart Disease (Text4HeartII): Randomized Controlled Trial. JMIR Mhealth Uhealth 2021; 9:e24952. http://www.ncbi.nlm.nih.gov/pubmed/?term=34106081

4. Padilla López A. Statin adherence and health outcomes after st-elevation myocardial infarction: 1-year follow-up study. Rev Clin Esp (Barc) 2021; 221:331-340. http://www.ncbi.nlm.nih.gov/pubmed/?term=34059230

Atherosclerosis & Imaging

1. Carvalho K, Ferreira AAM, Barbosa NC *et al.* Atorvastatin Attenuates Vascular Remodeling in Mice with Metabolic Syndrome. Arquivos brasileiros de cardiologia 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34161419
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6. Härdtner C, Ehlert CA, Hilgendorf I. New insights in statins affecting atheromatous plaque macrophages. Curr Opin Lipidol 2021; 32:258-264. http://www.ncbi.nlm.nih.gov/pubmed/?term=34054106
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8. Zhang H, Jiang M, Hou H, Li Q. Efficacy of simvastatin on carotid atherosclerotic plaque and its effects on serum inflammatory factors and cardiocerebrovascular events in elderly patients. Experimental and therapeutic medicine 2021; 22:819. http://www.ncbi.nlm.nih.gov/pubmed/?term=34131442
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Equation: Insights From 3 Large Prospective Cohorts. J Am Heart Assoc 2021; 10:e019589. http://www.ncbi.nlm.nih.gov/pubmed/?term=34092110

10. Eng D, Chute C, Khandwala N *et al.* Automated coronary calcium scoring using deep learning with multicenter external validation. NPJ Digit Med 2021; 4:88. http://www.ncbi.nlm.nih.gov/pubmed/?term=34075194
11. Michelucci E, Giorgi ND, Finamore F *et al.* Lipid biomarkers in statin users with coronary artery disease annotated by coronary computed tomography angiography. Scientific reports 2021; 11:12899. http://www.ncbi.nlm.nih.gov/pubmed/?term=34145378

Atorvastatin/Rosuvastatin

1. Carvalho K, Ferreira AAM, Barbosa NC *et al.* Atorvastatin Attenuates Vascular Remodeling in Mice with Metabolic Syndrome. Arquivos brasileiros de cardiologia 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34161419
2. Baraka SA, Tolba MF, Elsherbini DA *et al.* Rosuvastatin and low dose carvedilol combination protects against isoprenaline- induced myocardial infarction in rats: Role of PI3K/Akt/Nrf2/HO-1 signaling. Clin Exp Pharmacol Physiol 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34081810
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6. Ping S, Lin W, Liu A *et al.* Ultraviolet photolysis of four typical cardiovascular drugs: mechanisms, influencing factors, degradation pathways, and toxicity trends. Environmental science and pollution research international 2021. http://www.ncbi.nlm.nih.gov/pubmed/?term=34164790
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approach: a case report. European heart journal. Case reports 2021; 5:ytab151. http://www.ncbi.nlm.nih.gov/pubmed/?term=34124564

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10. Climent E, Benaiges D, Pedro-Botet J. Hydrophilic or Lipophilic Statins? Frontiers in cardiovascular medicine 2021; 8:687585. http://www.ncbi.nlm.nih.gov/pubmed/?term=34095267
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24. Asad M, Asdaq SMB, Mohzari Y *et al.* Pharmacokinetic and pharmacodynamic interaction of Rosuvastatin calcium with guggulipid extract in rats. Saudi journal of biological sciences 2021; 28:3490-3496. http://www.ncbi.nlm.nih.gov/pubmed/?term=34121889
25. Warita K, Ishikawa T, Sugiura A *et al.* Concomitant attenuation of HMGCR expression and activity enhances the growth inhibitory effect of atorvastatin on TGF-β-treated epithelial cancer cells. Scientific reports 2021; 11:12763. http://www.ncbi.nlm.nih.gov/pubmed/?term=34140545

Basic science

1. Alhakamy NA, Badr-Eldin SM, Aldawsari HM *et al.* Fluvastatin-Loaded Emulsomes Exhibit Improved Cytotoxic and Apoptosis in Prostate Cancer Cells. AAPS PharmSciTech 2021; 22:177. http://www.ncbi.nlm.nih.gov/pubmed/?term=34128106

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Cancer

1. Alhakamy NA, Badr-Eldin SM, Aldawsari HM *et al.* Fluvastatin-Loaded Emulsomes Exhibit Improved Cytotoxic and Apoptosis in Prostate Cancer Cells. AAPS PharmSciTech 2021; 22:177. http://www.ncbi.nlm.nih.gov/pubmed/?term=34128106

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Children

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CVD

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