

25. Ulmer Tagung für Alter(n)sfragen – Bethesda Klinik Ulm 03.03.2018

Neues aus der Kardiologie

Prof. Dr. Armin Imhof

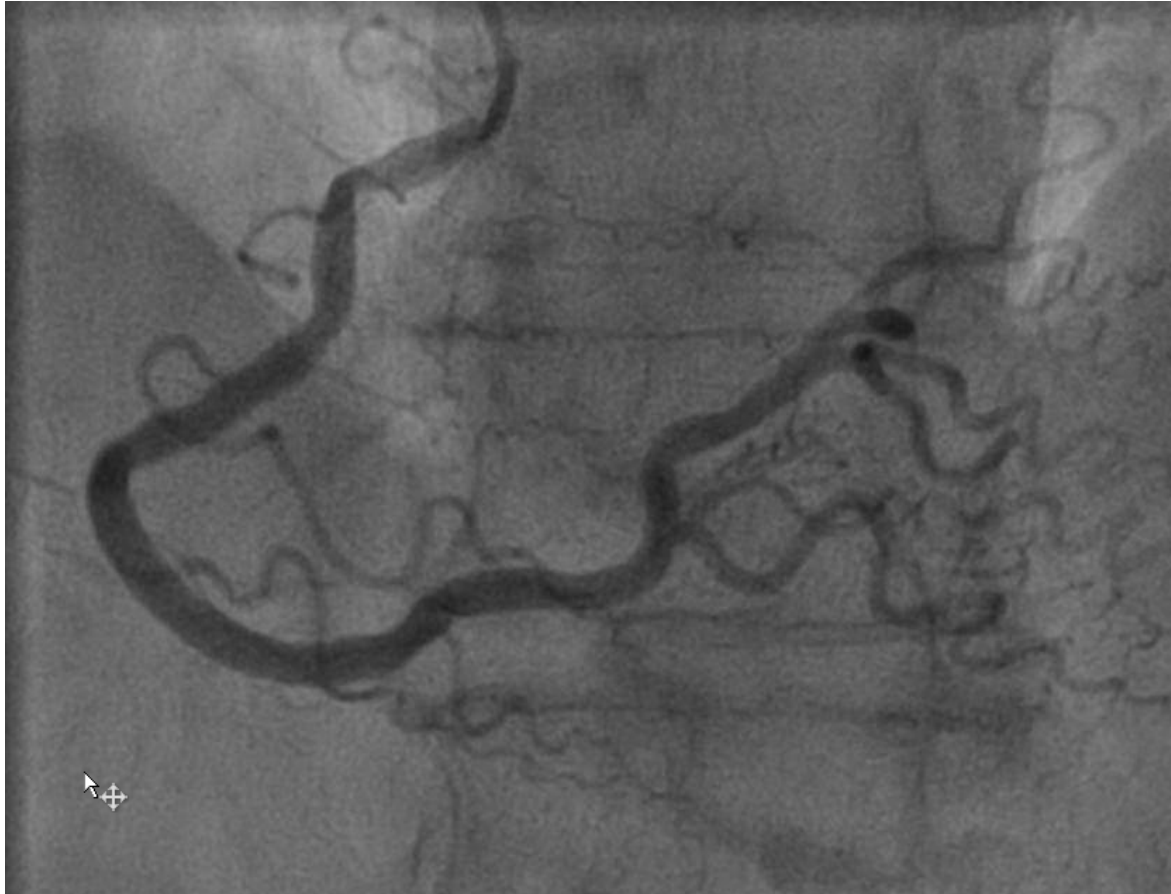
Zentrum für Innere Medizin • Klinik für Innere Medizin II

Kardiologie • Angiologie • Pneumologie • Internistische Intensivmedizin

Fallbeispiel

- 82 Jahre, weiblich
- Notfallmäßige stationäre Aufnahme mit Angina pectoris und hypertensiver Entgleisung
- CVRF: 12 py (Ex), AHT, HLP, BMI 29
- EKG: T-Negativierung V2-5
- Labor: Troponin T 330 auf 420
- Diagnose: NSTEMI
- Patientin nach Blutdrucksenkung beschwerdefrei

Herzkatheterbefund – Rechte Herzkranzarterie



Herzkatheterbefund – Linke Herzkranzarterie



Herzkatheterbefund – Linke Herzkranzarterie nach Stent



Cholesterin

☐ Cholesterin	< 5.0	mmol/l		5.2 (+)
☐ Triglyceride	< 1.7	mmol/l		3.5 (+)
☐ HDL-Cholesterin	> 1.2	mmol/l		1.6
☐ LDL-Cholesterin	< 3.0	mmol/l		2.9

LDL= 113 mg/dl

Medikation bei Entlassung

ASS	100 mg	1-0-0 (dauerhaft)
Clopidogrel	75 mg	1-0-0 (bis einschließlich Januar 2019)
Ramipril	10 mg	0-0-1
Amlodipin	5 mg	1-0-1
Metoprolol	47,5 mg	2-0-2
Torasemid	10 mg	1-0-1
Atorvastatin	40 mg	0-0-1 (Ziel LDL <1,8mmol/l)
Weitere Medikation:		
Pantoprazol	40 mg	1-0-0
Ferrosanol	100 mg	0-0-1
Donepezil	10 mg	0-0-0-1
Citalopram	20 mg	1-0-0

Statine bei alten Patienten?



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Appropriateness of statin prescription in the elderly

M. Ruscica^{a,*}, C. Macchi^{a,1}, C. Pavanello^b, A. Corsini^{a,c}, A. Sahebkar^d, C.R. Sirtori^e

^a Dipartimento di Scienze Farmacologiche e Biomolecolari, Università degli Studi di Milano, Milan, Italy

^b Centro E. Grossi Paoletti, Dipartimento di Scienze Farmacologiche e Biomolecolari, Università degli Studi di Milano, Milan, Italy

^c Multimedica IRCCS, Milan, Italy

^d Biotechnology Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran

^e School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

Studien – Primär- und Sekundärprävention

Table 3

Randomized controlled trials discussed in the text.

Study	Treatment arms	Characteristics of the study	Primary endpoint	NNT
Primary prevention				
ASCOT-LLA [30]	Atorvastatin 10 mg vs placebo	N = 19,342 (6570 ≥ 60 years) Age = 60 years or older Follow-up = 3.3 years ^b	Nonfatal MI and nonfatal CHD	128 (< 60 years) 82 (> 60 years)
JUPITER [32,33]	Rosuvastatin 20 mg vs placebo	N = 5695 Age = 70 years or older Follow-up = 2 years ^b	First major cardiovascular event	94 (< 70 years) 62 (≥ 70 years)
HOPE-3 [28]	Rosuvastatin 10 mg vs placebo	N = 12,705 Age = M > 55 and F > 65 Follow-up = 5.6 years ^b	Composite of cardiovascular death, nonfatal MI, nonfatal stroke	114 (≤ 65 years) 55 (> 65 years)
ALLHAT-LLT [34]	Pravastatin 40 mg vs UC	N = 2867 adults Age = 65–74 years and ≥ 75 years Follow-up = 4.63 ^a (pravastatin) and 4.77 years ^a (UC)	All-cause mortality	No-significant reduction in mortality
CARDS [35,36]	Atorvastatin 10 mg vs placebo	N = 2838 (1129 patients aged 65–75 years) Age = 40–75 Follow-up = 3.9 ^b	Coronary events	33 (< 65 years) 21 (> 65 years)
Secondary prevention				
PROVE IT-TIMI 22 [40,41]	Pravastatin 40 mg vs atorvastatin 80 mg	N = 4162 (730 ≥ 70 years) Age = 70 years or older Follow-up = 2 years ^a	Cardiac death, nonfatal MI or revascularization	For those achieving LDL-C < 70 mg/dl: 44 (< 70 years) 13 (> 70 years)
SAGE [42]	Atorvastatin 80 mg vs pravastatin 40 mg	N = 893 Age = 66–85 years Follow-up = 1 year	Absolute change in total duration of myocardial ischemia	71
SPARCL [43]	Atorvastatin 80 mg vs placebo	N = 4731 (2249 ≥ 65 years) Age = 65 years or older (30.9% were 70 years, 15.7% were 75 years, and 4.6% were 80 years) Follow-up = 4.9 years ^a	Fatal or nonfatal stroke	52 (overall) 39 (< 65 years) NS (≥ 65 years)
Primary and secondary prevention				
PROSPER [29]	Pravastatin 40 mg vs placebo	N = 5804 Age = 70–82 years Follow-up = 3.2 years ^a	Composite of coronary death, nonfatal MI and fatal or nonfatal stroke	48
HPS [44,45]	Simvastatin 40 mg vs placebo	N = 20,536 (N = 5806 ≥ 70 years) Age = 40–80 years Follow-up = 5 years ^a	Total mortality and cause-specific mortality; Major vascular events	19 (< 65 years) 16 (65–69 years) 26 (70–74 years) 11 (≥ 75 years)

Empfehlungen der Fachgesellschaften

Table 1

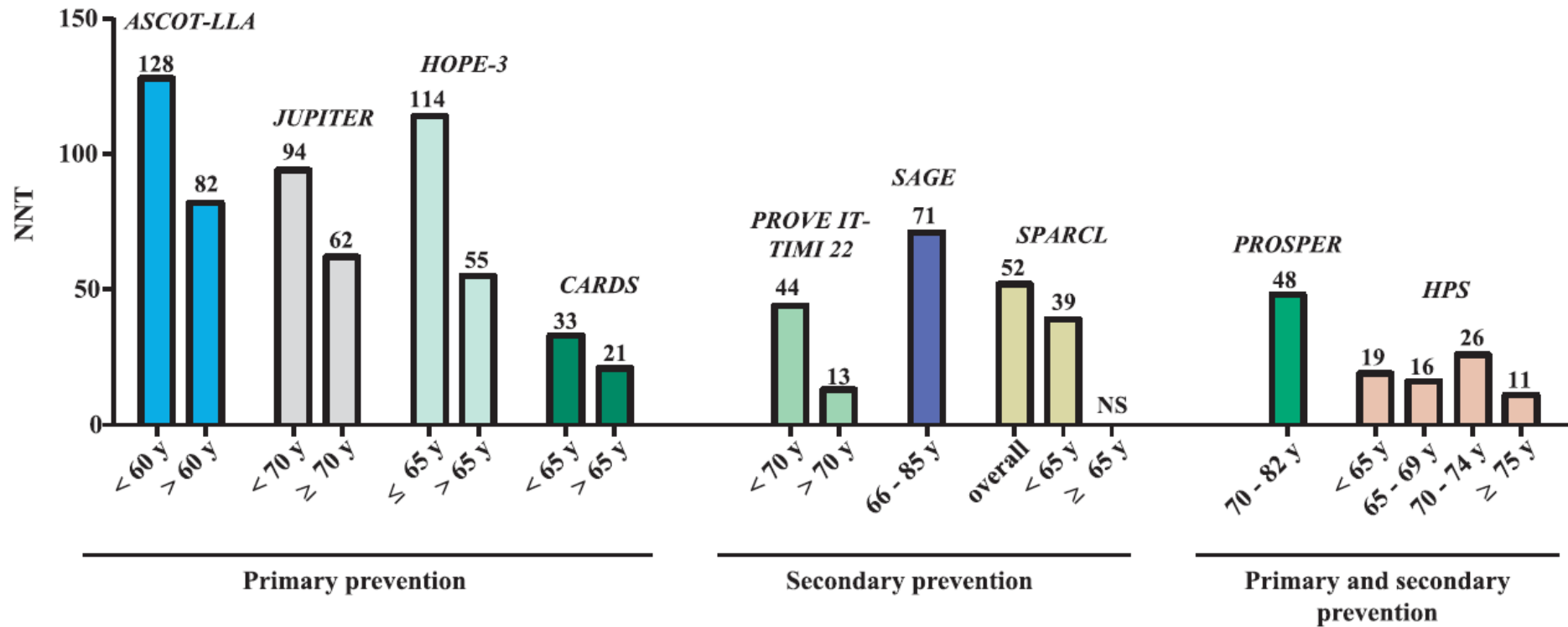
Recommendations about the use of statin therapy in the elderly (> 75 years of age).

ACC/AHA 2013 ^[20, 21]	USPSTF ^[22]	NLA 2015 ^[23]	ESC/EAS 2016 ^[24, 25]
Primary prevention			
No recommendations for primary prevention in people > 75 years of age Note: "In persons with diabetes...	No recommendations	"Statin-eligible patients should undergo a patient-centered discussion with their provider about the risks and benefits of	"Statin therapy should be considered in older adults free from CVD, particularly in the presence of hypertension,
the basis of considerations of ASCVD risk-reduction benefits, the potential for adverse effects and drug-drug interactions, and patient preferences"			Note: "Since older people often have co-morbidities and have altered pharmacokinetics, lipid-lowering medication should be started at a lower dose and then titrated with caution to achieve target lipid levels that are the same as in younger subjects."
Secondary prevention			
Moderate-intensity statin therapy should be considered for individuals >75 years of age with clinical ASCVD" Note: consider adverse effects, drug-drug interactions, and patient preferences	No recommendations	"Patients who are >75 to <80 years of age may be treated with similar regimens after a careful consideration of the risk-benefit ratio of such therapy" "In patients ≥80 years of age, moderate intensity statin therapy should be considered based upon a provider-patient discussion of the risks and	"Treatment with statins is recommended for older adults with established CVD in the same way as for younger patients" Note: "Since older people often have co-morbidities and have altered pharmacokinetics, lipid-lowering medication should be started at a lower dose and then

Primärprävention: Keine Empfehlung oder allenfalls bei Hochrisikopatienten

Sekundärprävention: ACC/AHA „Consider“, über 80 allenfalls moderate Dosis ESC/EAS Statintherapie wie bei jungen Patienten

NNT in Abhängigkeit vom Alter



NNT in Abhängigkeit vom Alter - Primärprävention

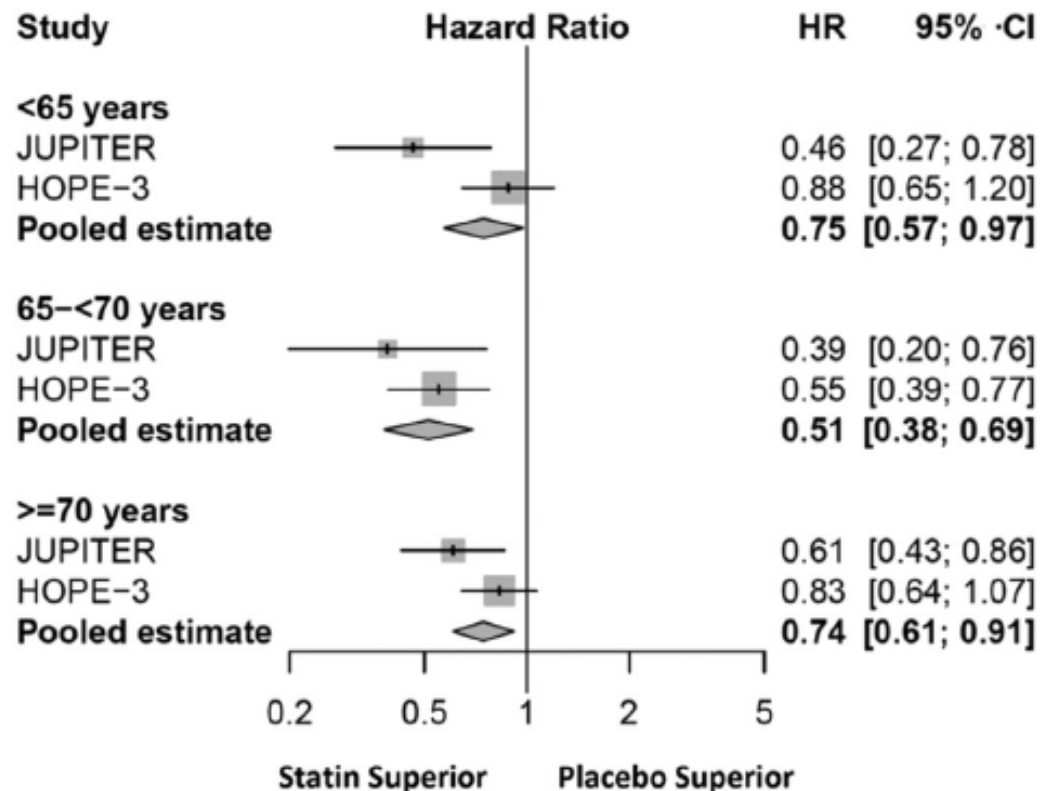


Fig. 2. Meta-analysis within age subgroups of the JUPITER (Justification for Use of Statins in Prevention: An Intervention Trial Evaluating Rosuvastatin) and HOPE-3 (Heart Outcomes Prevention Evaluation) primary prevention trials evaluating the effects of ro-suvastatin on the composite end point of nonfatal MI infarction, nonfatal stroke, or CV death. Adapted from [37] with permission.

Biologische Uhr und langes Leben?

Aging Cell (2017) **16**, pp237–243

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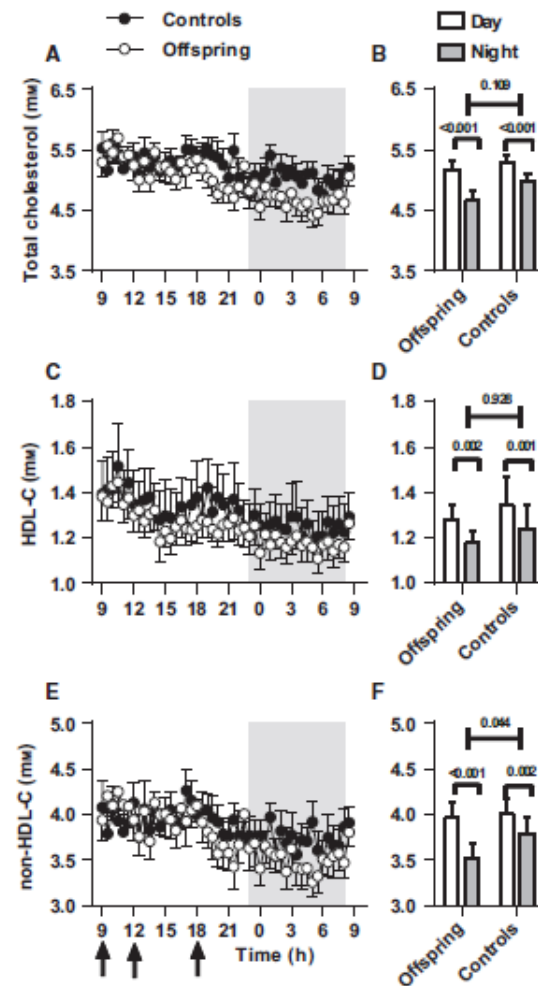
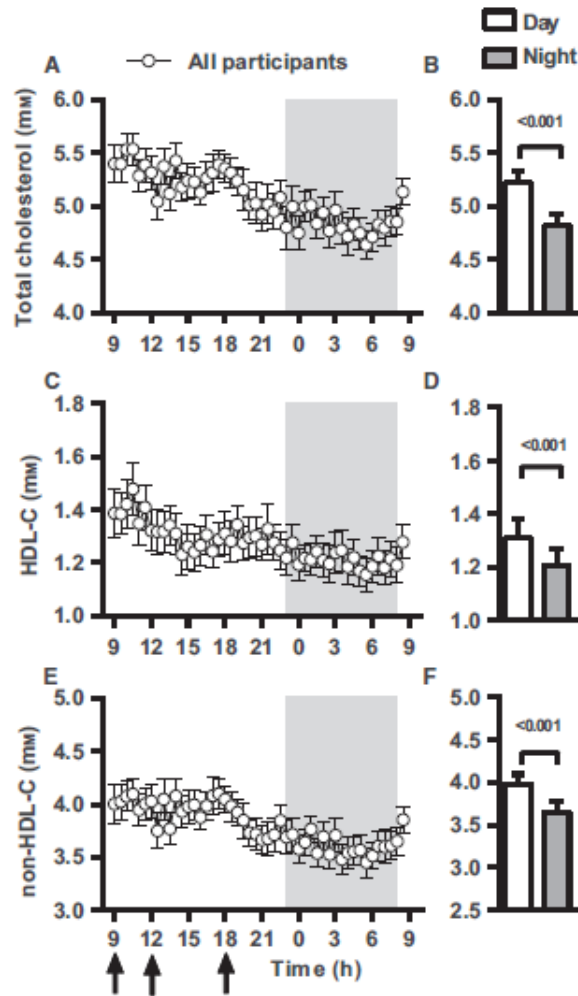
Familial longevity is characterized by high circadian rhythmicity of serum cholesterol in healthy elderly individuals

Rosa van den Berg,^{1,2} Raymond Noordam,³
Sander Kooijman,^{1,2} Steffy W. M. Jansen,³ Abimbola A.
Akintola,³ P. Eline Slagboom,⁴ Hanno Pijl,¹ Patrick C. N.
Rensen,^{1,2} Nienke R. Biermasz¹ and Diana van Heemst³

Introduction

During the past decades, life expectancy has increased substantially, resulting in a growing number of individuals with a high age (Oeppen & Vaupel, 2002). Aging has been associated with an increased risk of

Biologische Uhr und langes Leben?



Zusammenfassung

- 86 Jahre, weiblich
- Diagnose: NSTEMI bei 1-GE-KHK
- Statintherapie sinnvoll
- Multimedikation und Interaktion beachten
- Zielwert 70 mg/dl oder 50% Senkung vom Ausgangswert

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