



AKTUALITY V HYPOLIPIDEMICKEJ TERAPII AKÚTNEHO KORONÁRNEHO SYNDRÓMU



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Cieľová hodnota LDL u 65 ročného pacienta po 2
AKS v priebehu posledných 14 mesiacov?

1. LDL < 3 mmol/l
2. LDL < 2,6 mmol/l
3. LDL < 1,8 mmol/l
4. LDL < 1,4 mmol/l
5. LDL < 1 mmol/l

AKS A KVS RIZIKO

Very-high-risk

People with any of the following:

Documented ASCVD, either clinical or unequivocal on imaging. Documented ASCVD includes previous ACS (MI or unstable angina), stable angina, coronary revascularization (PCI, CABG, and other arterial revascularization procedures), stroke and TIA, and peripheral arterial disease. Unequivocally documented ASCVD on imaging includes those findings that are known to be predictive of clinical events, such as significant plaque on coronary angiography or CT scan (multivessel coronary disease with two major epicardial arteries having >50% stenosis), or on carotid ultrasound.

DM with target organ damage,^a or at least three major risk factors, or early onset of T1DM of long duration (>20 years).

Severe CKD (eGFR <30 mL/min/1.73 m²).

A calculated SCORE \geq 10% for 10-year risk of fatal CVD.

FH with ASCVD or with another major risk factor.

CIELE HYPOLIPIDEMICKEJ TERAPIE PRI AKS

Lipidový profil má byť stanovený čo najskôr po prijatí pacienta s AKS

Emergentná hypolipidemická terapia statínom nezávisle od hladiny LDL

LDL cholesterol je silne asociovaný s rizikom aterosklerózy a následných KVS príhod.

10% vzostup LDL má za následok 20% vzostup rizika ICHS

CTT: redukcia LDL o 1 mmol/l vedie k redukcii KV príhod (IM, KCHS, CMP alebo nutnosti revaskularizácie) o 22%, koronárnych príhod o 23%, CMP o 17% a celkovej mortality o 10% v 5 ročnom sledovaní



STATINY A AKS

Recommendations	Class ^a	Level ^b
Routine pre-treatment or loading (on a background of chronic therapy) with a high-dose statin should be considered in patients undergoing PCI for an ACS or elective PCI. ^{443,454,456}	Ia	B

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Pleiotropné účinky statínov: zlepšenie funkcie endotelu, antioxidantné vlastnosti, protizápalové pôsobenie, antiproliferatívne, antitrombotické účinky, vplyv na angiogénu

Najlepšie dokumentované a najintenzívnejšie antioxidantné pôsobenie a antiproliferatívne účinky vo vzťahu ku cievnemu zápalu má atorvastatín

CIELE HYPOLIPIDEMICKEJ TERAPIE PRI AKS

Recommendations	Class ^a	Level ^b
In secondary prevention for patients at very-high risk, ^c an LDL-C reduction of $\geq 50\%$ from baseline ^d and an LDL-C goal of < 1.4 mmol/L (< 55 mg/dL) are recommended. ^{22–25, 119, 120}	I	A
In primary prevention for individuals at very-high risk but without FH, ^e an LDL-C reduction of $\geq 50\%$ from baseline ^d and an LDL-C goal of < 1.4 mmol/L (< 55 mg/dL) are recommended. ^{24–26}	I	C
In primary prevention for individuals with FH at very-high risk, an LDL-C reduction of $\geq 50\%$ from baseline and an LDL-C goal of < 1.4 mmol/L (< 55 mg/dL) should be considered.	IIa	C
For patients with ASCVD who experience a second vascular event within 2 years (not necessarily of the same type as the first event) while taking maximally tolerated statin-based therapy, an LDL-C goal of < 1.0 mmol/L (< 40 mg/dL) may be considered. ^{119, 120}	IIb	B
In patients at high risk, ^f an LDL-C reduction of $\geq 50\%$ from baseline ^d and an LDL-C goal of < 1.8 mmol/L (< 70 mg/dL) are recommended. ^{24, 25}	I	A
In individuals at moderate risk, ^f an LDL-C goal of < 2.6 mmol/L (< 100 mg/dL) should be considered. ²⁴	IIa	A
In individuals at low risk, ^f an LDL-C goal < 3.0 mmol/L (< 116 mg/dL) may be considered. ²⁴	IIb	A

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* Pacienti s VVR - redukcia LDL $\geq 50\%$ bazálnej hodnoty a cieľ $< 1,4$ mmol

* Pri druhej vaskulárnej príhode počas 2 rokov pri maximálnej dávke statinu - LDL < 1 mmol/l

KOMBINAČNÁ TERAPIA

Recommendations	Class ^a	Level ^b
In all ACS patients without any contraindication or definite history of intolerance, it is recommended that high-dose statin therapy is initiated or continued as early as possible, regardless of initial LDL-C values. ^{438,440,442}	I	A
Lipid levels should be re-evaluated 4–6 weeks after ACS to determine whether a reduction of $\geq 50\%$ from baseline and goal levels of LDL-C < 1.4 mmol/L (< 55 mg/dL) have been achieved. Safety issues need to be assessed at this time and statin treatment doses adapted accordingly.	IIa	C
If the LDL-C goal is not achieved after 4–6 weeks with the maximally tolerated statin dose, combination with ezetimibe is recommended. ³³	I	B
If the LDL-C goal is not achieved after 4–6 weeks despite maximal tolerated statin therapy and ezetimibe, the addition of a PCSK9 inhibitor is recommended. ^{119,120}	I	B
In patients with confirmed statin intolerance or in patients in whom a statin is contraindicated, ezetimibe should be considered.	IIa	C
For patients who present with an ACS and whose LDL-C levels are not at goal, despite already taking a maximally tolerated statin dose and ezetimibe, the addition of a PCSK9 inhibitor early after the event (during hospitalization for the ACS event if possible) should be considered.	IIa	C

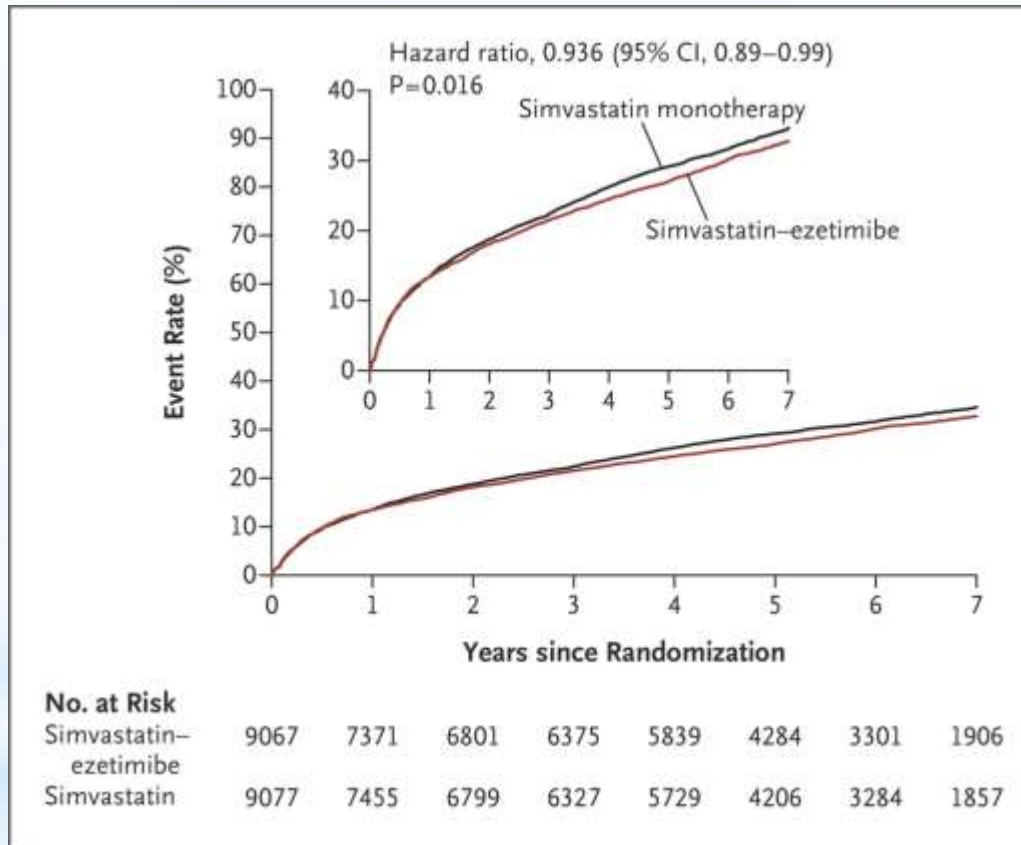
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***Ezetimib: IMPROVE-IT**

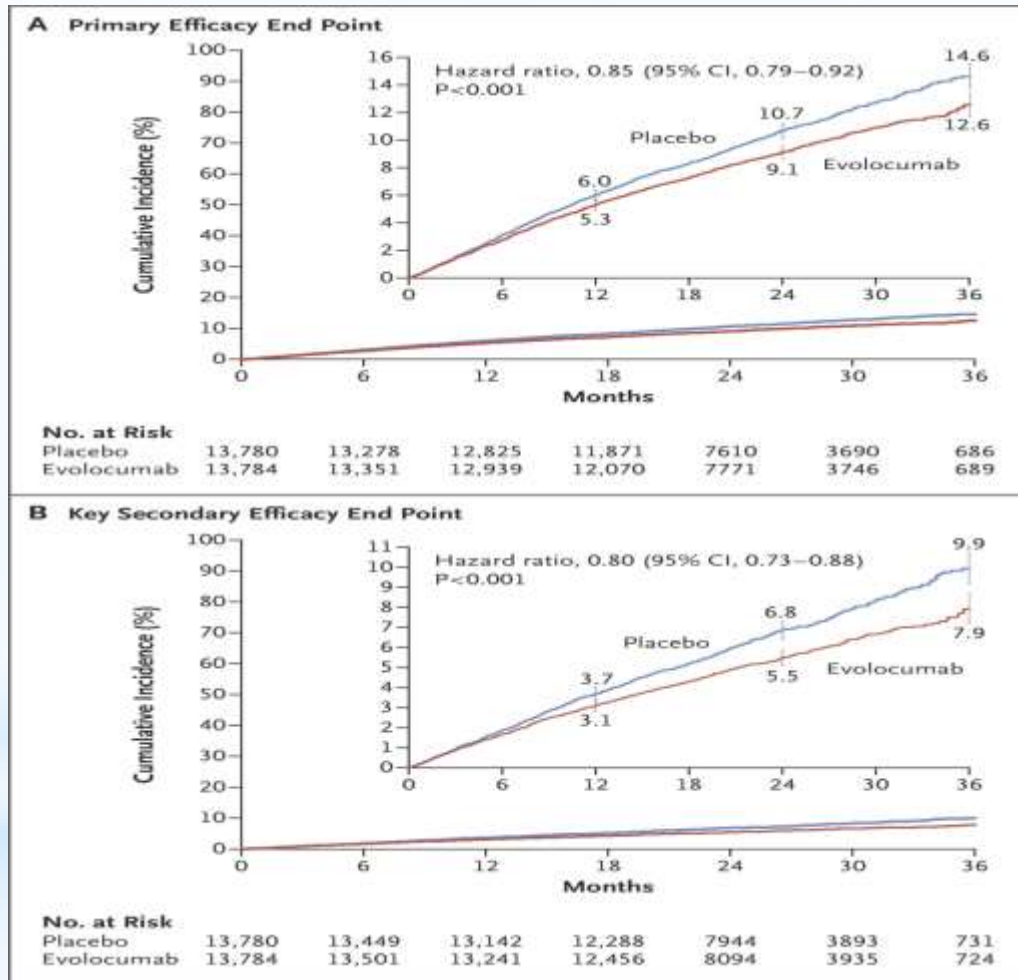
***Inhibítory PCSK9: FOURIER, ODYSSEY**

- NÚ: podráždenie v mieste vpichu, „flu-like“ symptómy, ovplyvnenie kognitívnych funkcií?

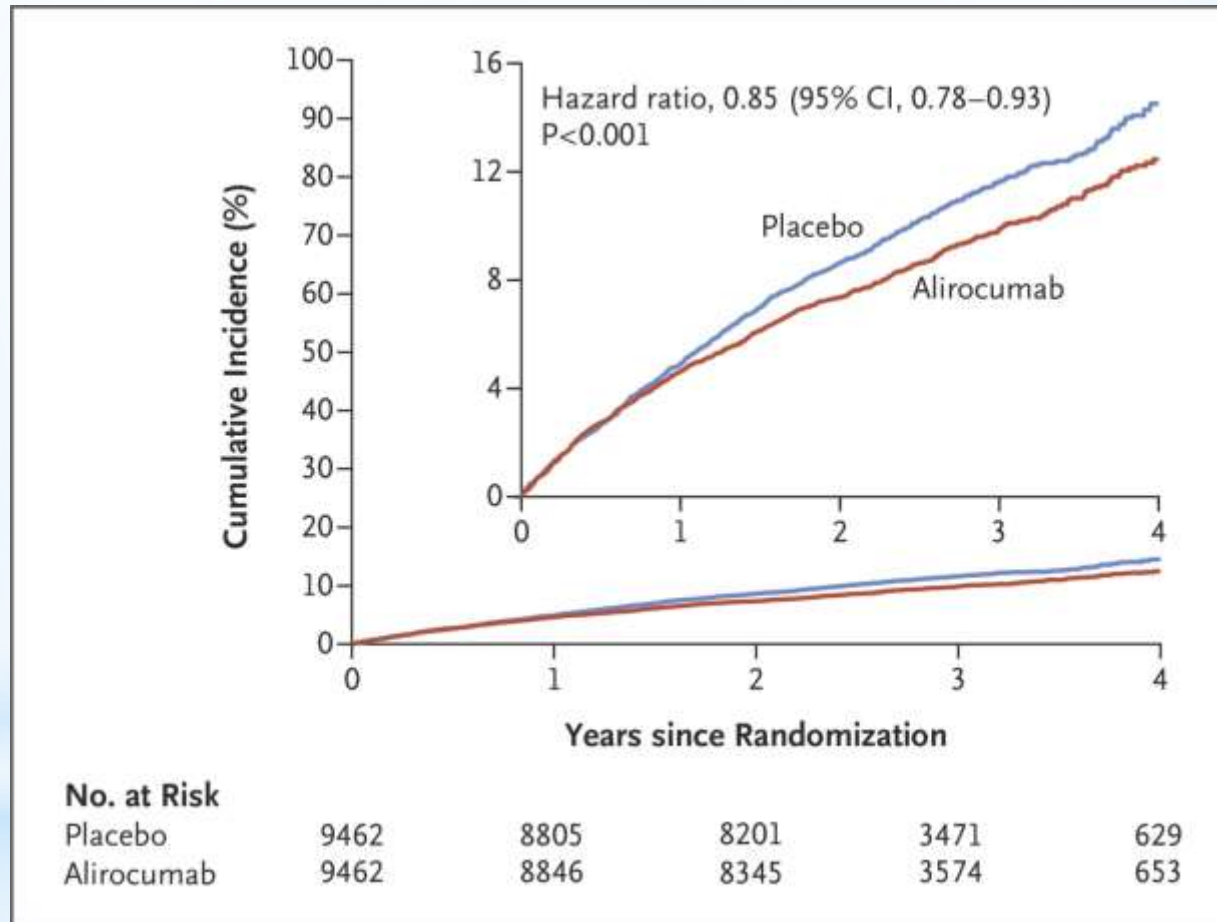
EZETIMIB PRIDANÝ K STATÍNU PO AKS



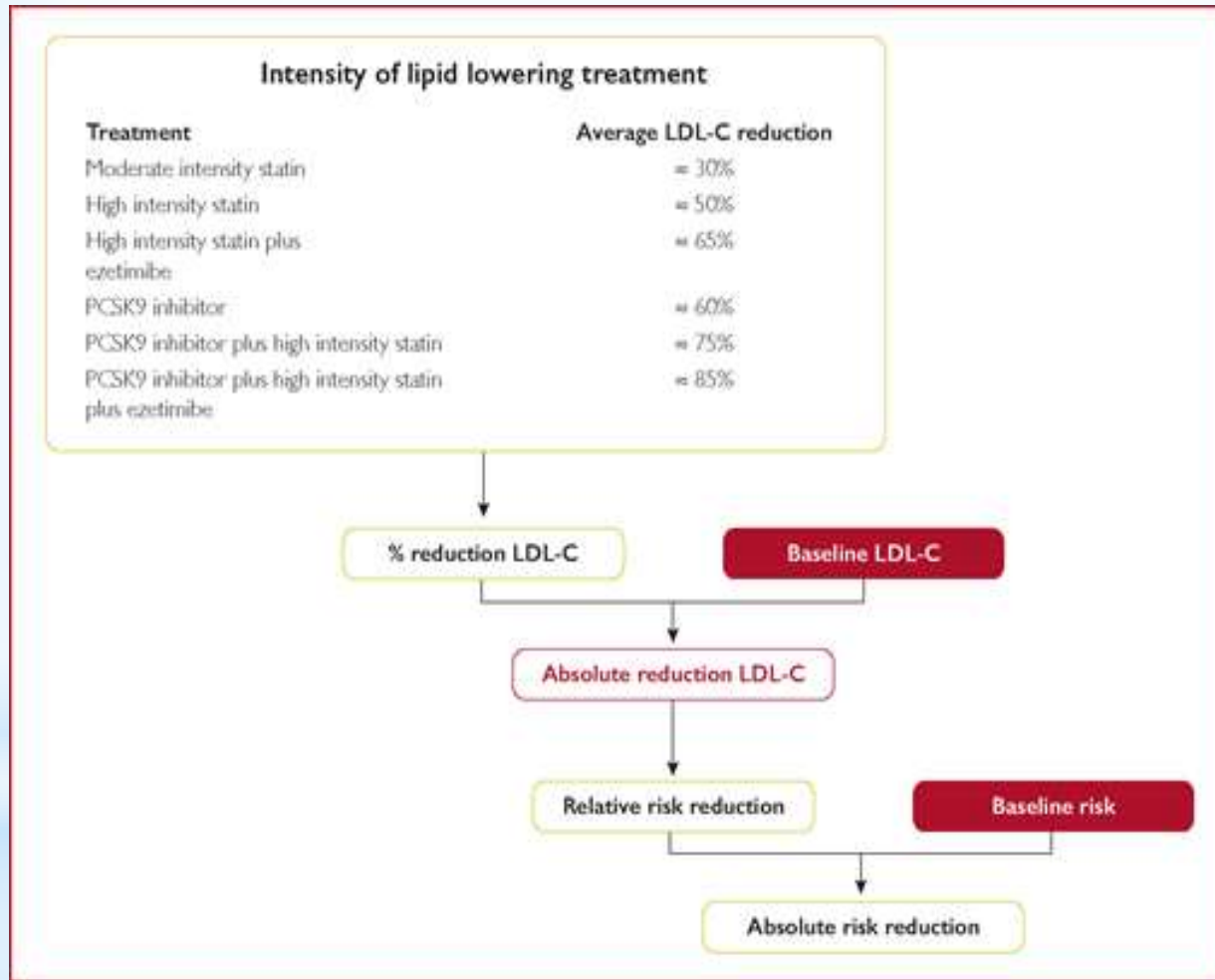
EVOLOCUMAB A VPLYV NA KVS OCHORENIA



ALIROCUMAB A VPLYV NA KVS RIZIKO U PACIENTOV S AKS



KOMBINAČNÁ TERAPIA



SEKUNDÁRNE CIELE

* Non-HDL-C sekundárne ciele: <2.2, 2.6 a 3.4 mmol/L (<85, 100 a 130 mg/dL) pre veľmi vysoké, vysoké a stredné riziko.

* ApoB: <65, 80 a 100 mg/dl pre veľmi vysoké, vysoké a stredné riziko.

* HDL a TG?

TAKE HOME MESSAGE

For FH patients with ASCVD who are at very-high risk, treatment to achieve a $\geq 50\%$ reduction from baseline and an LDL-C < 1.4 mmol/L (< 55 mg/dL) is recommended. If goals cannot be achieved, a drug combination is recommended.	I	C
Treatment with a PCSK9 inhibitor is recommended in very-high risk FH patients if the treatment goal is not achieved on a maximal tolerated statin plus ezetimibe.	I	C
In children, testing for FH is recommended from the age of 5 years, or earlier if HoFH is suspected.	I	C
Treatment of dyslipidaemias in older people		
Treatment with statins is recommended for older people with ASCVD in the same way as for younger patients.	I	A
Treatment with statins is recommended for primary prevention, according to the level of risk, in older people aged ≤ 75 years.	I	A
It is recommended that the statin is started at a low dose if there is significant renal impairment and/or the potential for drug interactions, and then titrated upwards to achieve LDL-C treatment goals.	I	C
Treatment of dyslipidaemias in DM		
In patients with T2DM at very-high risk, ^a an LDL-C reduction of $\geq 50\%$ from baseline and an LDL-C goal of < 1.4 mmol/L (< 55 mg/dL) is recommended.	I	A
In patients with T2DM at high risk, ^a an LDL-C reduction of $\geq 50\%$ from baseline and an LDL-C goal of < 1.8 mmol/L (< 70 mg/dL) is recommended.	I	A
Statins are recommended in patients with T1DM who are at high or very-high risk. ^a	I	A
Statin therapy is not recommended in pre-menopausal patients with or without DM who are considering pregnancy, or not using adequate contraception.	III	C
Management of patients with ACS		
In all ACS patients without any contraindication or definite history of intolerance, it is recommended that high-dose statin therapy is initiated or continued as early as possible, regardless of initial LDL-C values.	I	A
If the LDL-C goal is not achieved after 4–6 weeks with the maximally tolerated statin dose, combination with ezetimibe is recommended.	I	B
If the LDL-C goal is not achieved after 4–6 weeks despite maximal tolerated statin therapy and ezetimibe, adding a PCSK9 inhibitor is recommended.	I	B
Lipid-lowering therapy for prevention of ASCVD events in patients with prior ischaemic stroke		
Patients with a history of ischaemic stroke or TIA are at very-high risk of ASCVD, particularly recurrent ischaemic stroke, so it is recommended that they receive intensive LDL-C-lowering therapy.	I	A
Treatment of dyslipidaemias in chronic HF or valvular heart diseases		
Initiation of lipid-lowering therapy is not recommended in patients with HF in the absence of other indications for their use.	III	A
Initiation of lipid-lowering treatment is not recommended in patients with aortic valvular stenosis without CAD to slow progression of aortic valve stenosis in the absence of other indications for their use.	III	A
Lipid management in patients with moderate-to-severe (Kidney Disease Outcomes Quality Initiative stages 3–5) CKD		
It is recommended that patients with stage 3–5 CKD are considered to be at high or very-high risk of ASCVD.	I	A
The use of statins or statin/ezetimibe combination is recommended in patients with non-dialysis-dependent stage 3–5 CKD.	I	A
In patients with dialysis-dependent CKD who are free of ASCVD, commencement of statin therapy is not recommended.	III	A
Lipid-lowering drugs in patients with PAD (including carotid artery disease)		
In patients with PAD, lipid-lowering therapy—including a maximum tolerated dose of a statin, plus ezetimibe, or a combination with a PCSK9 inhibitor if needed—is recommended to reduce the risk of ASCVD events.	I	A
Lipid-lowering drugs in patients with CIID		
The use of lipid-lowering drugs only on the basis of the presence of CIID is not recommended.	III	C
Lipid-lowering drugs in patients with SMI		
It is recommended that SMIs are used as modifiers for estimating total ASCVD risk.	I	C
It is recommended that the same guidelines for the management of total ASCVD risk are used in patients with SMI as are used in patients without such disease.	I	C
It is recommended that in patients with SMI, intensified attention is paid to adherence to lifestyle changes and to compliance with drug treatment.	I	C

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- Pacienti s AKS majú mať zahájenú hypolipidemickú terapiu najvyššou dávkou statinu nezávisle na hodnote LDL
- Ak po 4-6 týždňoch nie je dosiahnutá cieľová hodnota LDL, odporúča sa kombinácia s ezetimibom
- Ak po 4-6 týždňoch nie je dosiahnutá cieľová hodnota LDL napriek kombinácii s ezetimibom, odporúča sa pridanie inhibítorov PCSK9
- Cieľové LDL $< 1,4$ mmol/l (pri 2 KV príhode < 1 mmol/l)

ĎAKUJEM ZA POZORNOST

