KOMBINUOTO ANTITROMBOZINIO GYDYMO KONTRAVERSIJOS

Neurologo požiūris

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NEUROLOGIJOS KLINIKA

2015-05-15

BAČKONYS

ĮVADAS: Galvos smegenų išeminiai kraujotakos sutrikimai

Priežastys

- Trombinė maitinančios arterijos okliuzija
- Embolija:
  - ➢Kardiogeninė embolizacija;
  - ➢Arterioarterinė embolizacija;
  - ➢Paradoksinė embolizacija.

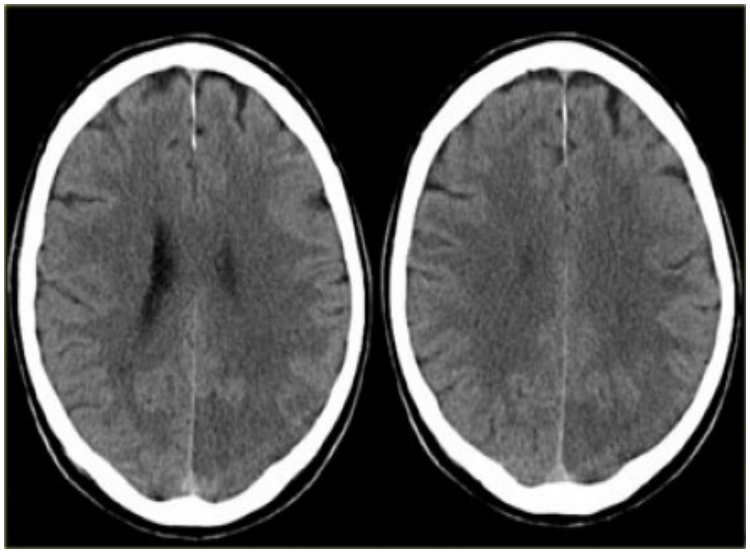
Gydymas

- I/V trombolizė/MT
- Pirminė profilaktika
- Antrinė profilaktika

PSIP, INSULTO RIZIKA
IKH, TE RIZIKA

Klinikinis atvejis (1)

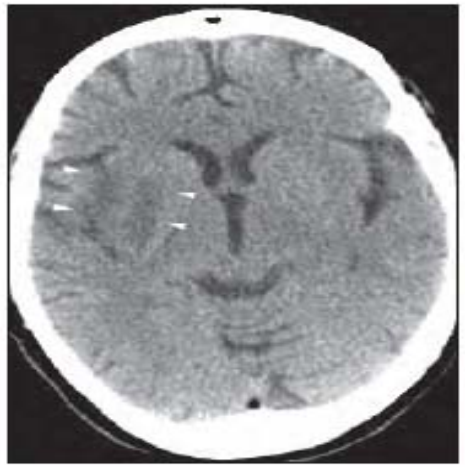
- 74 metų moteris;
- 2 val. nuo simptomų pradžios atvyko į LPS;
- NIH 11b.



- Anamnezėje – prieširdžių virpėjimas (PV);
- antikoagulantų nevartojo;
- Arterinė hipretenzija (AH);
- Hipercholesterolemija;

Klinikinis atvejis (1) Gydymas

1. I/v trombolizė– alteplaze (mg/kg)
2. NIH 11b. → po 1 val 9 b., po 24 val → 4b.



Antitrombozinis gydymas: ką pasirinkti?

- Kada pradėti skirti gydymą po trombolizės taikymo?
- Ką skirti – antiagregantus ar antikoagulantus?
- Pakartotino insulto rizikos vertinimas;
- Kraujavimo rizikos vertinimas;
- Vaisto efektyvumo vertinimas;
- Vaisto saugumo vertinimas.

Insulto ir tromboembolinių komplikacijų rizika, esant PV

CHA2DS2-VASC (kardioembolinio insulto rizikos vertinimo skalė)

Didieji rizikos veiksniai	**Kliniškai reikšmingi nepagrindiniai rizikos veiksniai**
Anksčiau buvęs insultas, PSIP ar embolija Amžius ≥75 m.	Vidutinio ar sunkaus laipsnio ŠN (pvz., KS IF≤40% Arterinė hipertenzija – cukrinis diabetas Moteriška lytis – amžius nuo 65 iki 74 metų Aterosklerozė (buvęs MI, periferinių kraujagyslių liga, aterosklerotinės plokštelės aortoje)

Rizikos veiksnių vertinimas balais (pastaba: amžius vertinamas balais 0, 1 arba 2, maksimali balų suma 9)	
Rizikos veiksnys	
Kongestinis ŠN/KS disfunkcija Arterinė hipertenzija Amžius ≥75 m. Cukrinis diabetas Insultas, PSIP ar embolija Aterosklerotinė kraujagyslių liga Amžius nuo 65 iki 74 Moteriška lytis	1 1 2 1 2 1 1 1
Maksimalus rezultatas	9

Kraujavimo rizikos įvertinimo skalė (HAS-BLED)

	Klinikinės charakteristikos	Balai
H (hypertension)	Hipertenzija	1
A (Abnormal K/L f-tion)	Sutrikusi inkstų/kepenų f-ja	1 ar 2
S (Stroke/TIA)	Insultas/PSIP	1
B (History of bleeding)	Buves kraujavimas	1
L (Labile INR)	Labilus INR	1
E (Elderly >65)	Amžius >65 m.	1
D (Drugs)	Vaistai (antiagregantai, NPV, steroidai) ir/ar alkoholis	1 ar 2
	Maža/vidutinė rizika **Didelė rizika**	1-2 ≥3

Expert Opin. Drug Saf. (2015) 14 (6)

Antikoaguliantų skyrimas po išeminio insulto

Insulto sunkumas	Apibrėžimas	Antikoagulianto skyrimas		Pastabos
		Nevartojusiems	Vartojusiems	
PSIP		24 val. nuo diagnozės nustatymo	Tęsti anksčiau vartotą antikoaguliantą be pertraukos.	
Lengvas insultas	NIHSS <4	Pradėti 3 d. nuo ligos pradžios	Tęsti anksčiau vartotą antikoaguliantą be pertraukos, jei TNS 2 – 3 ribose	
Vidutinis	NIHSS 4-10	Pradėti 5 - 7 d. nuo ligos pradžios esant stabiliai būklei	Pradėti 5 - 7 d. nuo ligos pradžios esant stabiliai būklei	Pradėti 5 - 7 d. nuo ligos pradžios esant stabiliai būklei
Sunkus	NIHSS >10	Pradėti 10 – 14 d. nuo ligos pradžios	Nutraukti 10 d (jei yra hemoraginė transformacija – 14 d). Skubi kontroliuojama į/v heparinizacija, jei didelė embolizacijos rizika (protezuotas vožtuvas)	Prieš skiriant atlikti galvos smegenų KT

Guidelines for the Early Management of Patients With Acute Ischemic Stroke, 2013

PROFILAKTIKA

PIRMINĖ (insulto rizikos veiksnių korekcija iki pirmojo ŪGSKS)

- AH
- DISLIPIDEMIJA
- PV
- RŪKYMAS
- HIPERHOMOCISTEINEMIJA
- CD
- KITOS ŠIRDIES LIGOS

1. Netiesioginio veikimo antikoagulantai
   - esant vidutinei ar didelei kardioembolinei rizikai
2. Antiagregantai
   - IA PV <65m
   - IA vidutinė/didelė KE rizika
   - IIB besimptomės stenozės >50 %/ath plokštelės

Polivka J. et al. Personalized approach to primary and secondary prevention of ischemic stroke. The EPMA Journal 2014, 5:9

Antrinės profilaktikos tikslai

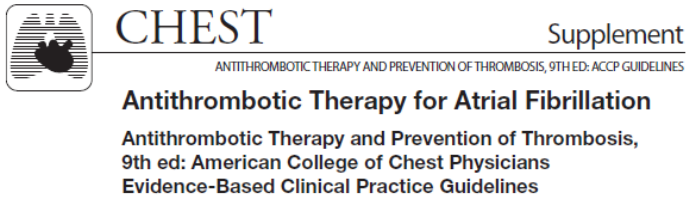
- Sumažinti pakartotino kraujotakos sutrikimo riziką;
- Sumažinti kraujavimo riziką;
- Ligoniams su vidutine bei didele pakartotino insulto rizika, adekvatus profilaktinis gydymas turi būti skiriamas kuo greičiau, pageidautina per 24 val. nuo įvykio;
- Kitiems ligoniams atlikti tyrimus bei paskirti profilaktinį gydymą rekomenduojama per 1 savaitę nuo įvykio.

Polivka J. et al. Personalized approach to primary and secondary prevention of ischemic stroke. The EPMA Journal 2014, 5:9

Antrinė profilaktika (1)
Antiagregantai

- Nekardioembolinės kilmės PSIP arba išeminis insultas;
- Antiagregantai (acetilsalicilo rūgštis; acetilsalicilo rūgšties ir prailginto atsipalaidavimo dipiridamolio kombinacija; klopidogrelis) (I, A įrodymai)

Pacientams su PV esant mažai rizikai ($CHADS_2$ arba CHA_2DS_2-VASc 0) gydymas nerekomenduojamas arba rekomenduojami antiagregantai, esant didelei rizikai ($CHADS_2$ ≥1 arba CHA_2DS_2-VASc ≥ 2) rekomenduojami antikoaguliantai.



2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol. 2014;64(21):e1-e76. doi:10.1016/j.jacc.2014.03.022

Antrinė profilaktika (2)
Antikoaguliantai

Tiesioginiai oraliniai antikoagulantai
- Dabigatranas (tiesioginis trombino inhibitorius)
- Rivaroxabanas (Xa faktoriaus inhibitorius)
- Apixabanas
- Edoxabanas

Vitamin K antagonistai
warfarinas

Netiesioginio veikimo antikoaguliantai (NVA) - lėtinis prieširdžių virpėjimas ar kitokį įrodytą kardiogeninį embolų šaltinį (I, A įrodymai).

NVA embolinio insulto profilaktikai dozuojami :

➢ TNS 2,0-3,0 ; ligoniams su su dirbtiniu širdies vožtuvu –TNS 2,5-3,5 (I, B įrodymai)

P. Verdecchia, F.Angeli, G Lip, G.Reboldi et al. Edoxaban in the Evolving Scenario of Non Vitamin K Antagonist Oral Anticoagulants Imputed Placebo Analysis and Multiple Treatment Comparisons. PLoS One. 2014; 9(6): e100478.
Zoppellaro G et al. Minimizing the risk of hemorrhagic stroke during anticoagulant therapy for atrial fibrillation. Expert Opin.Drug Saf 2015, 14(6)

TOA (Dabigatranas 150mg BID, Apixabanas 5mg BID, Rivaroxabanas 20mg OD, Edoxabanas 60mg OD) vs. Warfarinas

	ŠS	95% PI	95% CI	P reiksme
Insultas/sistemine embolizacija	0,786	0,715	0,864	<0,001
Insultas	0,801	0,728	0,881	<0,001
Hemoraginis insultas	0,497	0,402	0,615	<0,001
Išeminis ar kt.insultas	0,919	0,825	1,023	0,123
Sistemine embolizacija	0,600	0,417	0,863	0,006
Kraujavimas (krjv)	0,848	0,791	0,910	<0,001
Intrakranijinis krjv	0,479	0,405	0,566	<0,001
Gastrointestinal. krjv	1,287	1,105	1,440	<0,001
Miokardo infarktas	0,945	0,826	1,082	0,413
Mirtis nuo kitu priežas.	0,904	0,853	0,958	0,001

P. Verdecchia, F.Angeli, G Lip, G.Reboldi et al. Edoxaban in the Evolving Scenario of Non Vitamin K Antagonist Oral Anticoagulants Imputed Placebo Analysis and Multiple Treatment Comparisons. PLoS One. 2014; 9(6): e100478

Kombinuota terapija esant PV po ŪGSKS

Antiagregantai (aspirinas/klopidogrelis)

+

Antikoagulantai (warfarinas/TOA)

=

?

Kraujavimo, hemoraginio ir išeminio insulto dažnis vartojant antikoagulantus ir antiagregantus, esant PV

	Non-exposed	Antiplatelet	Warfarin and antiplatelet	Warfarin [reference]
Bleeding				
No. of events	261	582	33	133
Person-years of follow-up	5800	28333	745	4672
Incidence rate/1000 person-years	45.00	20.54	44.33	28.47
Relative risk (95% confidence interval), p value				
Unadjusted	1.63(1.32–2.02), 0.001	0.86(0.71–1.31),0.15	1.88(1.27–2.78), 0.043	1
Adjusted, Model 1[a]	1.45(1.17–1.80), <0.001	0.59(0.49–0.71), <0.001	1.33(0.91–1.94), 0.20	1
Hemorrhagic stroke				
No. of events	51	123	13	37
Person-years of follow-up	5883	29465	778	4805
Incidence rate/1000 person-years	8.67	4.17	16.71	7.70
Relative risk (95% confidence interval), p value				
Unadjusted	1.03(0.67–1.59), 0.86	0.53(0.37–0.77), <0.001	2.09(1.11–3.93), 0.031	1
Adjusted, Model 1[a]	1.02(0.66–1.57), 0.86	0.52(0.36–0.75), <0.001	2.03(1.08–3.83), 0.011	1
Ischemic stroke				
No. of events	370	1085	40	147
Person-years of follow-up	6239	26367	516	3942
Incidence rate/1000 person-years	59.30	41.15	77.58	37.29
Relative risk (95% confidence interval), p value				
Unadjusted	1.36(1.12–1.65), 0.003	1.08(0.91–1.27), 0.50	1.97(1.39–2.79), <0.001	1
Adjusted, Model 1[a]	1.33(1.09–1.61), 0.003	1.05(0.89–1.25), 0.50	1.90(1.34–2.70), <0.001	1

Chen PC, Lip GYH, Yeh G, Lin HJ, Chien KL (2015) Risk of Bleeding and Stroke with Oral Anticoagulation and Antiplatelet Therapy in Patients with Atrial Fibrillation in Taiwan: A Nationwide Cohort Study. PLoS ONE 10(4)

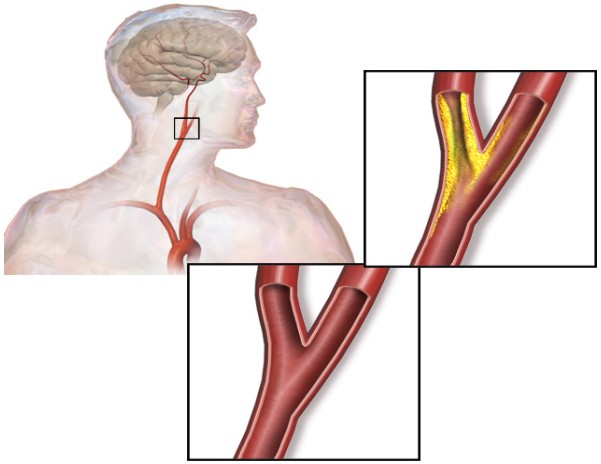
Įvykių rizikos įvertinimas HAS-BLED ir CHAD2-DS2-VASc, gydant antiagregantais ir antikoagulantais

	Non-exposed		Antiplatelet		Warfarin and antiplatelet		Warfarin [reference]	
	No. of event (incidence*)	RR (95%CI), P-value	No. of event (incidence*)	RR (95%CI), P-value	No. of event (incidence*)	RR (95%CI), P-value	No. of event (incidence*)	RR (95%CI)
Categorization of Bleeding risk by HAS-BLED								
Low (0–1)	38(11.9)	0.84(0.47–1.50), 0.56	21(4.8)	0.37(0.19–0.69), 0.002	3(24.7)	1.78(0.52–6.07), 0.36	17(12.5)	1.0
Intermediate (2)	78(63.2)	1.85(1.26–2.74), 0.002	144(16.9)	0.54(0.38–0.78), <0.001	6(31.6)	1.03(0.44–2.43), 0.95	39(30.5)	1.0
High (> = 3)	145(104.7)	2.44(1.84–3.23), <0.001	417(27.0)	0.70(0.55–0.89), 0.004	24(55.4)	1.43(0.91–2.27), 0.12	77(37.9)	1.0
Categorization of risk of ischemic stroke								
$CHADS_2$, classical								
Low (0)	52(18.7)	0.63(0.41–0.98), 0.034	140 (21.0)	0.81(0.56–1.17), 0.25	8(69.9)	2.62(1.21–5.63), <0.001	36(25.3)	1.0
Intermediate (1–2)	124 (60.4)	1.58(1.13–2.19), 0.007	428 (38.3)	1.14(0.85–1.53), 0.37	11(130.2)	3.75(1.36–10.38), 0.011	51(33.5)	1.0
High (>2)	194 (110.5)	1.64(1.23–2.18), <0.001	517 (60.4)	0.98(0.76–1.27), 0.89	21(200.3)	2.91(1.06–7.99), 0.039	60 (66.2)	1.0
$CHADS_2$2, revised								
Low (0)	52(18.7)	0.63(0.41–0.98), 0.034	140 (21.0)	0.81(0.56–1.17), 0.25	8(69.9)	2.62(1.21–5.63), <0.001	36(25.3)	1.0
Intermediate (1)	53 (44.9)	1.32(0.85–2.05), 0.22	221 (32.7)	0.98(0.68–1.41), 0.90	6(47.5)	1.39(0.19–10.20), 0.74	33(33.9)	1.0
High (> = 2)	265 (109.4)	1.66(1.29–2.12), <0.001	724 (59.1)	1.07(0.86–1.34), 0.55	26(220.5)	3.94(1.82–8.52), <0.001	78(54.8)	1.0
CHA_2DS_2-VASc								
Low (0)	18(15.3)	0.72(0.35–1.50), 0.30	40 (13.9)	0.75(0.40–1.40), 0.28	3(46.1)	2.57(0.73–9.04), 0.087	13(18.3)	1.0
Intermediate (1)	35(20.9)	0.62(0.36–1.06), 0.10	107 (23.4)	0.82(0.52–1.28), 0.50	6(82.7)	2.74(1.11–6.73), 0.021	23(28.1)	1.0
High (>1)	317 (78.7)	1.62(1.30–2.02), <0.001	938 (51.3)	1.07(0.88–1.31), 0.63	31(84.2)	1.69(1.14–2.52), <0.001	111(47.5)	1.0

Leif F et al .Evaluation of risk stratification schemes for ischaemic stroke and bleeding in 182 678 patients with atrial fibrillation: the Swedish Atrial Fibrillation cohort study . European Heart Journal (2012) 33, 1500–1510

Chen PC, Lip GYH, Yeh G, Lin HJ, Chien KL (2015) Risk of Bleeding and Stroke with Oral Anticoagulation and Antiplatelet Therapy in Patients with Atrial Fibrillation in Taiwan: A Nationwide Cohort Study. PLoS ONE 10(4):

Klinikinis atvejis (2)



- 65m. vyras;
- Išeminis insultas (2001) → aspirinas 100mg;
- K. VMA stenozė 90 proc. → Stentas - 0 proc (2006);
- D. VMA stenozė 75 proc. → Stentas - 0 proc. (2007);
- PSIP (2008)

- Gretutinės ligos: CD, AH;
- Gydymas: aspirinas 100mg/clopidogrelis 75mg. (I klasė, A įrod.)

KADA SKIRTI ANTIAGREGANTUS PO ŪMAUS KRAUJOTAKOS SUTRIKIMO?

Ūmus išeminis insultas

- Aspirinas per 48 val; Dozė: 160 –325 mg
- Sumažėja mirtingumas;
- Sumažėja pakartotino insulto rizika;

Lancet. 1997;349(9065):1569, Lancet. 1997;349(9066):1641

- Dviguba terapija antiagregantais- CHANCE NIH<3, ABCD2≥4

- Sumažėja insulto rizika, nepadidina krjv rizikos.

N Engl J Med. 2013;369(1):11
Lancet Neurol. 2007;6(11):961

PROFILAKTIKA

PIRMINĖ

- AH
- DISLIPIDEMIJA
- PV
- RUKYMAS
- HIPERHOMOCISTEINEMIJA
- CD
- KITOS SIRDIES LIGOS

1. Netiesioginio veikimo antikoagulantai
2. Antiagregantai

IA PV <65m

IA vidutine/didele KE rizika

IIB besimpomes stenozes >50 %/ath plokšteles

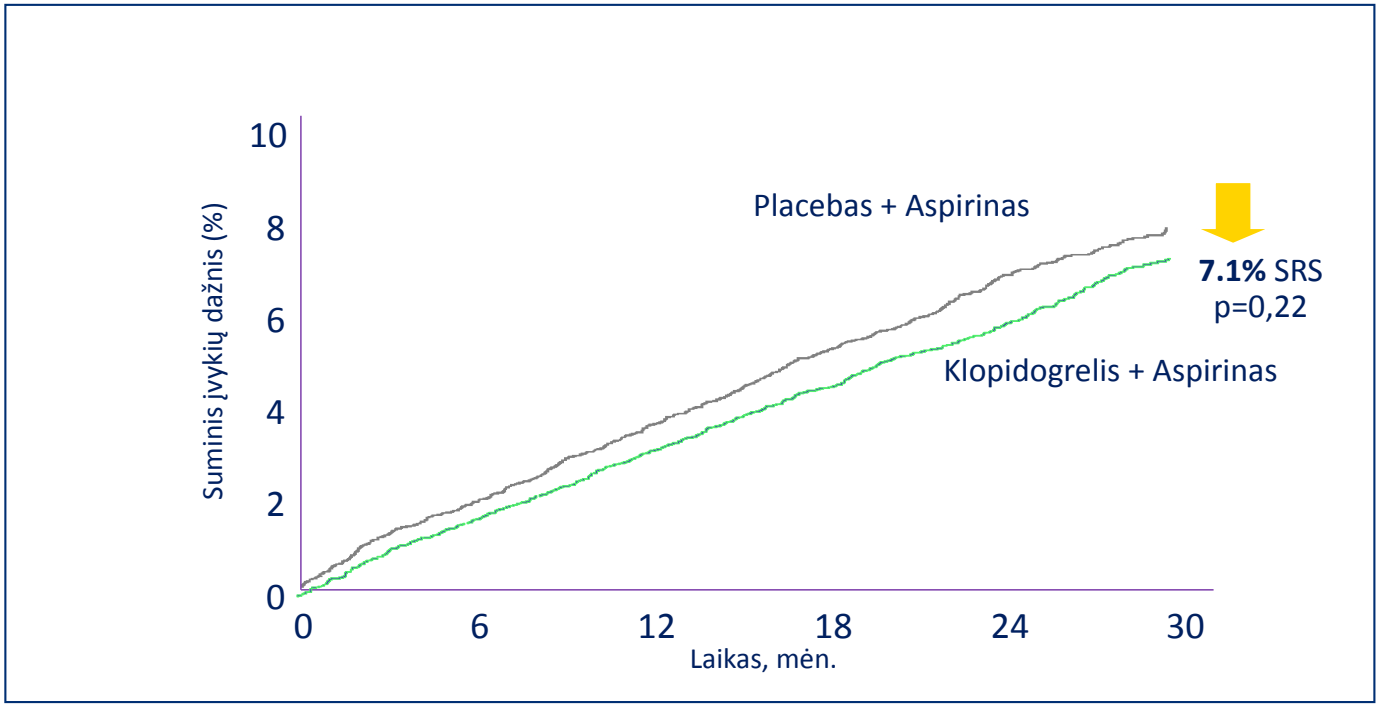
Polivka J. et al. Personalized approach to primary and secondary prevention of ischemic stroke. The EPMA Journal 2014, 5:9

Antrinė profilaktika

- Ligoniams kuriems nėra indikuotini vitamino K antagonistai arba nauji antikoaguliantai turi būti skiriami antiagregantai (I klasės A įrod.):
- Visiems ligoniams po patirto išeminio insulto arba PSIP turi būti paskirtas antitrombozinis gydymas.
- Nekardioembolinės kilmės PSIP arba išeminio insulto antrinei profilaktikai rekomenduojami antiagregantai (acetilsalicilo rūgštis; acetilsalicilo rūgšties ir prailginto atsipalaidavimo dipiridamolio kombinacija; klopidogrelis) (I, A įrodymai):
- Pirmo pasirinkimo vaistas, esant trombozinės kilmės PSIP arba išeminiam insultui, yra acetilsalicilo rūgšties ir prailginto atsipalaidavimo dipiridamolio kombinacija arba klopidogrelis (IIa, A įrodymai).

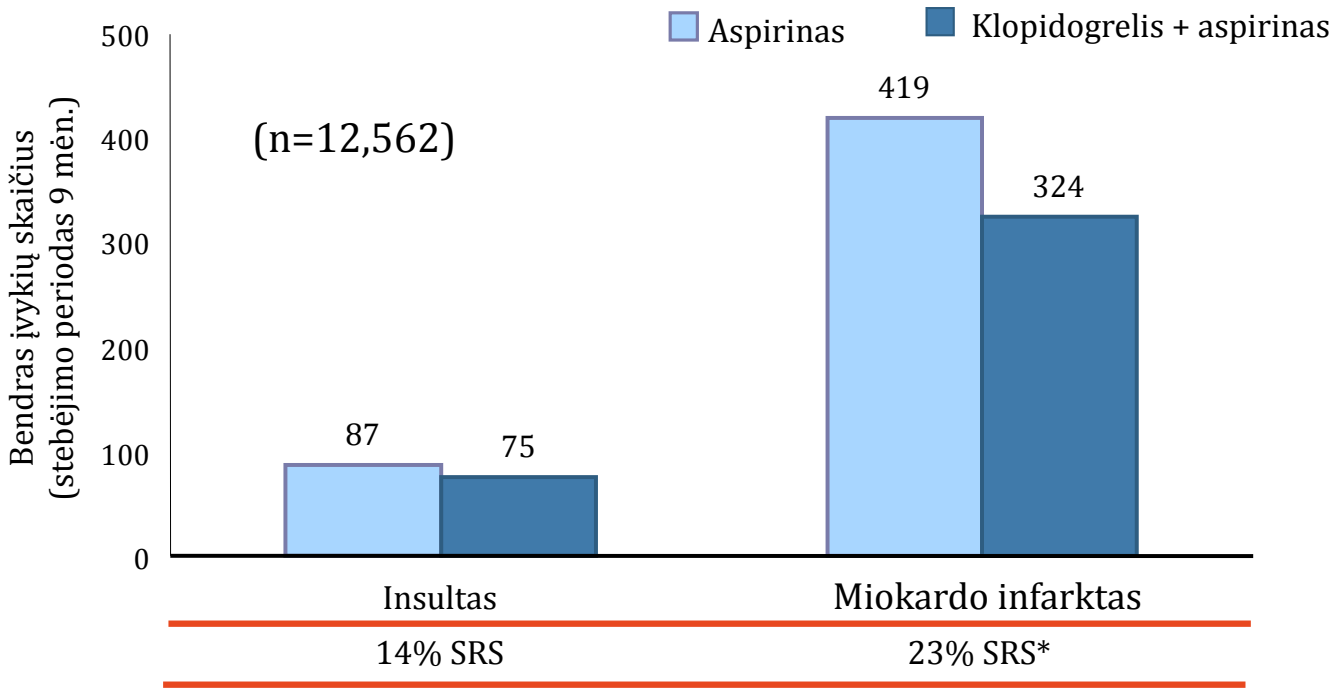
2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation. J Am Coll Cardiol. 2014;64(21):e1-e76. doi:10.1016/j.jacc.2014.03.022;

CHARISMA: pirminis tikslas (kraujagyslinė mirtis, miokardo infarktas, insultas)



Bhatt et al. *N Engl J Med*. 2006.354.

CURE: antiagregantų kombinacija



*Statistiškai patikima
SRS = santykinis rizikos sumažėjimas

CURE Trial Investigators. N Engl J Med 2001; 345 (7): 494–502

CHARISMA: kraujavimo rizika

	Klopidogrelis+ Aspirinas	Placebas + Aspirinas	Santykinė rizika (95% CI)	P reikšmė
Sunkus kraujavimas	130 (1.7)	104 (1.3)	1.25 (0.97–1.61)	0.09
Mirtinas kraujavimas	26 (0.3)	17 (0.2)	1.53 (0.83–2.82)	0.17
Pirminė intrakranijinė kraujosruva	26 (0.3)	27 (0.3)	0.96 (0.56–1.65)	0.89
Vidutinis kraujavimas	164 (2.1)	101 (1.3)	1.62 (1.27–2.10)	<0.001

Bhatt et al. *N Engl J Med*. 2006.354.

Antiplatelet Treatment for Prevention of Cerebrovascular Events in Patients With Vascular Diseases

A Systematic Review and Meta-Analysis

Ghazaleh Gouya, MD; Jasmin Arrich, MD; Michael Wolzt, MD; Kurt Huber, MD; Freek W.A. Verheugt, MD; Paul A. Gurbel, MD; Agnes Pirker-Kees, MD; Jolanta M. Siller-Matula, MD, PhD

Background and Purpose—The efficacy and safety of different antiplatelet regimes for prevention of stroke in patients at high risk were investigated in a systematic review and meta-analysis.

Methods—We searched the Cochrane Central Register of Controlled Trials, MEDLINE, and Web of Science. Twenty-two studies comprising 173 371 patients were included.

Results—In the overall population, dual antiplatelet therapy (DAPT) with aspirin and clopidogrel in comparison to aspirin monotherapy reduced the relative risk of total stroke by 20% (risk ratio [RR], 0.80; 95% confidence interval [CI], 0.73–0.88; $P<0.0001$; $I^2=28\%$) and of ischemic stroke or transient ischemic attack by 23% (RR, 0.77; 95% CI, 0.69–0.85; $P<0.0001$; $I^2=18\%$) without increasing the risk of intracranial hemorrhage. In the secondary prevention cohort, DAPT with aspirin and clopidogrel also reduced the relative risk of total stroke by 24% as compared with aspirin alone (RR, 0.76; 95% CI, 0.68–0.86; $P<0.0001$; $I^2=0\%$). DAPT with prasugrel or ticagrelor and aspirin versus DAPT with clopidogrel and aspirin was not associated with a risk reduction of stroke.

Conclusions—DAPT with clopidogrel and aspirin compared with aspirin effectively reduces the risk of total and ischemic stroke in the overall cohort consisting of patients with cardiovascular disease without increase in intracranial hemorrhage, as well as decreases the risk of a recurrent total stroke in patients with a previous stroke/transient ischemic attack. Our meta-analysis suggests that DAPT including low-dose aspirin (75–100 mg) and clopidogrel (75 mg) should be further investigated as a strategy to reduce recurrent strokes.

Clinical Trial Registration—URL: http://www.crd.york.ac.uk/prospero. Unique identifier: CRD42011001596.

(*Stroke*. 2014;45:492-503.)

Dviguba terapija antiagregantais (aspirinas/klopidogrelis) > monoterapija aspirinu

Efficacy of Antiplatelet Therapy in Secondary Prevention Following Lacunar Stroke

Pooled Analysis of Randomized Trials

Chun Shing Kwok, MBBS*; Ashkan Shoamanesh, MD*; Hannah Charlotte Copley, MBBChir; Phyo Kyaw Myint, MD; Yoon K. Loke, MD; Oscar R. Benavente, MD

Background and Purpose—Lacunar stroke accounts for ≈25% of ischemic stroke, but optimal antiplatelet regimen to prevent stroke recurrence remains unclear. We aimed to evaluate the efficacy of antiplatelet agents in secondary stroke prevention after a lacunar stroke.

Methods—We searched MEDLINE, Embase, and the Cochrane library for randomized controlled trials that reported risk of recurrent stroke or death with antiplatelet therapy in patients with lacunar stroke. We used random effects meta-analysis and evaluated heterogeneity with I^2.

Results—We included 17 trials with 42 234 participants (mean age 64.4 years, 65% male) and follow up ranging from 4 weeks to 3.5 years. Compared with placebo, any single antiplatelet agent was associated with a significant reduction in recurrence of any stroke (risk ratio [RR] 0.77, 0.62–0.97, 2 studies) and ischemic stroke (RR 0.48, 0.30–0.78, 2 studies), but not for the composite outcome of any stroke, myocardial infarction, or death (RR 0.89, 0.75–1.05, 2 studies). When other antiplatelet agents (ticlodipine, cilostazol, and dipyridamole) were compared with aspirin, there was no consistent reduction in stroke recurrence (RR 0.91, 0.75–1.10, 3 studies). Dual antiplatelet therapy did not confer clear benefit over monotherapy (any stroke RR 0.83, 0.68–1.00, 3 studies; ischemic stroke RR 0.80, 0.62–1.02, 3 studies; composite outcome RR 0.90, 0.80–1.02, 3 studies).

Conclusions—Our results suggest that any of the single antiplatelet agents compared with placebo in the included trials is adequate for secondary stroke prevention after lacunar stroke. Dual antiplatelet therapy should not be used for long-term stroke prevention in this stroke subtype. **(*Stroke*. 2015;46:00-00. DOI: 10.1161/STROKEAHA.114.008422.)**

Monoterapija (aspirinas)> Dviguba terapija antiagregantais (aspirinas/klopidogrelis)

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Prevention

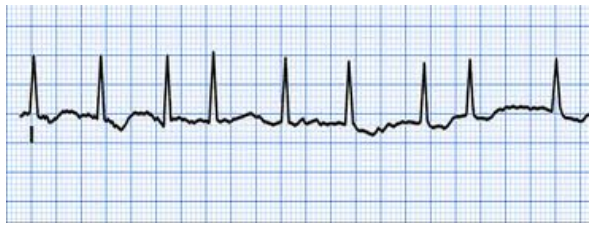
USE OF DUAL ANTIPLATELET VERSUS SINGLE ANTIPLATELET THERAPY FOR PREVENTION OF RECURRENT ISCHEMIC STROKE: META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

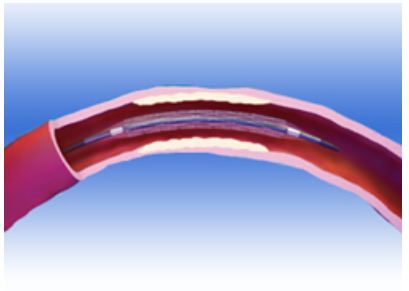
DAPT nesumažina pakartotino insulto rizikos (ŠS 0.89; 95% CI, 0.788 - 1.023, P 0.10), bet padidina, lyginant su monoterapija aspirinu, intracerebrinio kraujavimo rizika (ŠS 1.31; 95% CI, 1.091 - 1.582, P, 0.004). (Atlikta metaanalizė su 45,136 pacientais)

Authors: *Mohsin Salih, Yansoun Elmasry, Pedro Villablanca Spinetto, Hameem Kawsar, John Somberg, St Luke's Hospital, Chesterfield, MO, USA, Rush University, Chicago, IL, USA*

Klinikinis atvejis (3)

Klinikinis atvejis (1) + Klinikinis atvejis (2)





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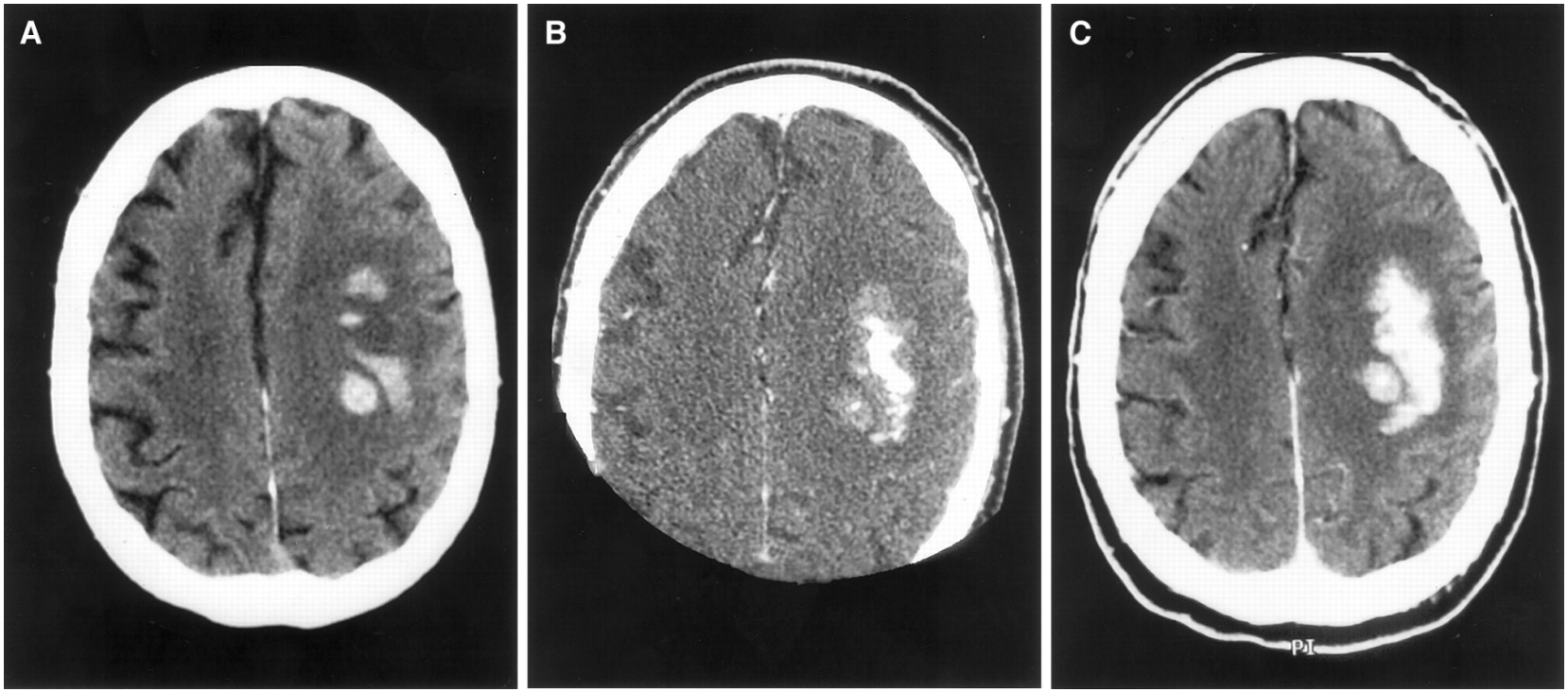
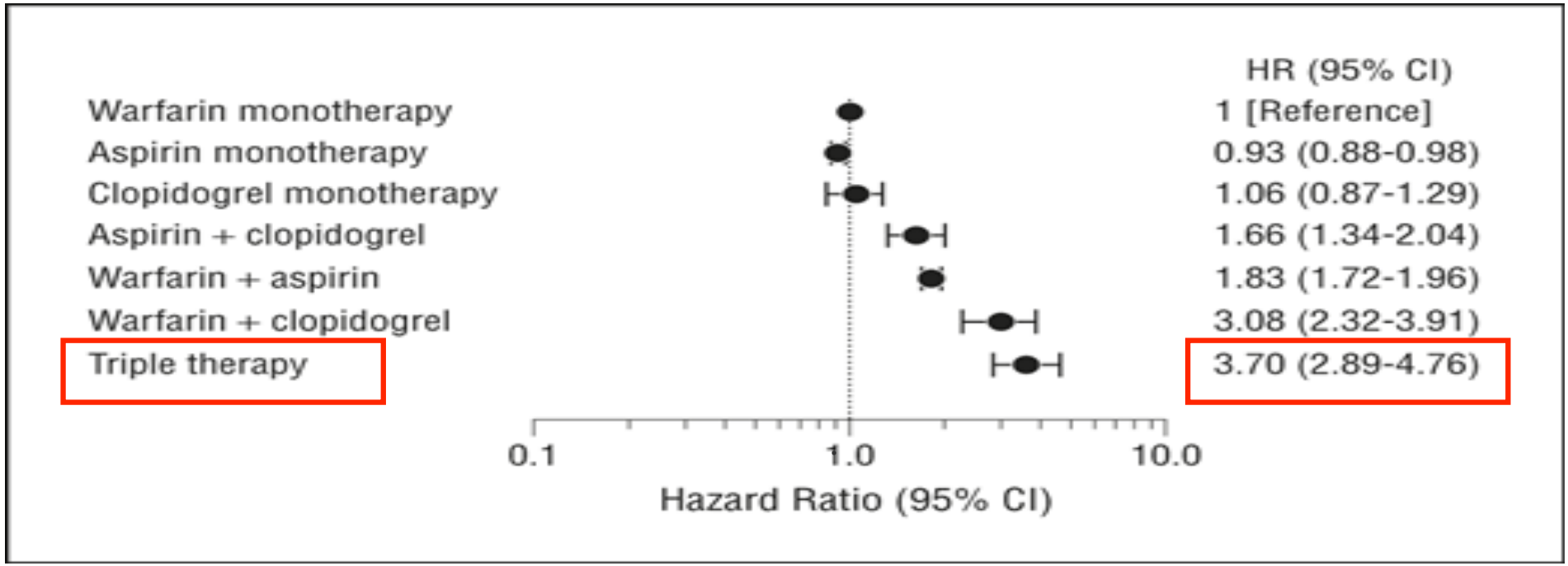
Rezultatas?

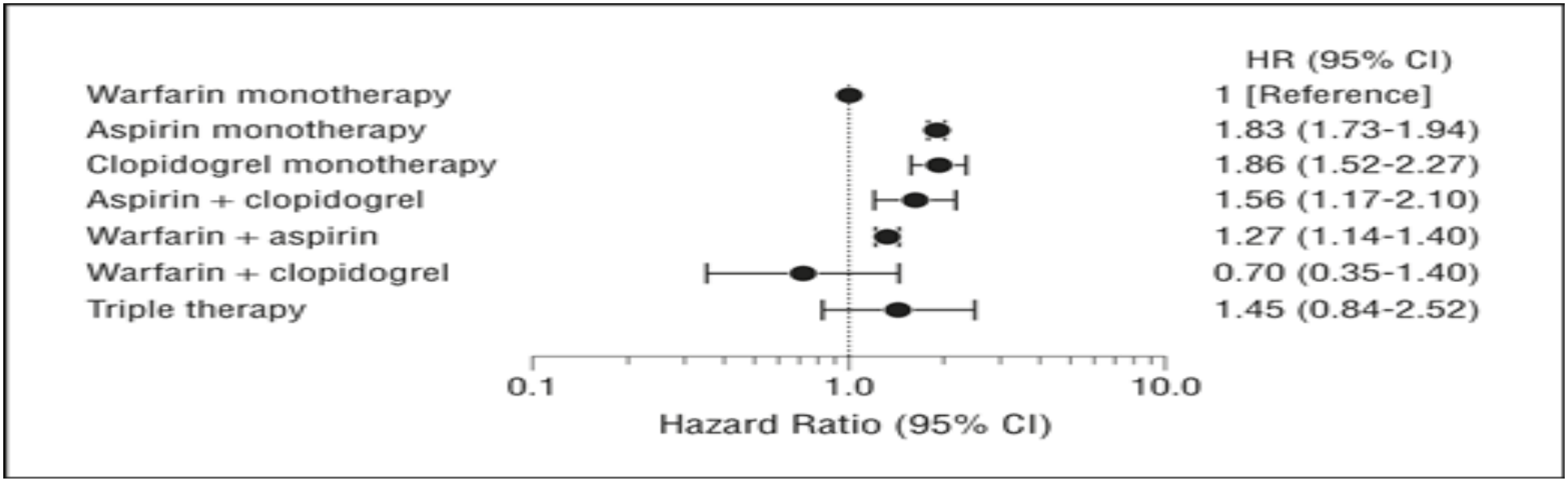


WARFARINAS, ASPIRINAS, KLOPIDOGRELIS AR JŲ KOMBINACIJOS ĮTAKA KRAUJAVIMO RIZIKAI



Morten HL et al. Risk of Bleeding With Single, Dual, or Triple Therapy With Warfarin, Aspirin, and Clopidogrel in Patients With Atrial Fibrillation. Arch Intern Med. 2010;170(16):1433-1441

WARFARINAS, ASPIRINAS, KLOPIDOGRELIS AR JŲ KOMBINACIJOS ĮTAKA IŠEMINIO INSULTO RIZIKAI



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Review Article

Recommendations for Management of Patients with Carotid Stenosis

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Stroke is a one of the leading causes of morbidity and mortality in the world. Carotid atherosclerosis is recognized as an important factor in stroke pathophysiology and represents a key target in stroke prevention; multiple treatment modalities have been developed to battle this disease. Multiple randomized trials have shown the efficacy of carotid endarterectomy in secondary stroke prevention. Carotid stenting, a newer treatment option, presents a less invasive alternative to the surgical intervention on carotid arteries. Advances in medical therapy have also enabled further risk reduction in the overall incidence of stroke. Despite numerous trials and decades of clinical research, the optimal management of symptomatic and asymptomatic carotid disease remains controversial. We will attempt to highlight some of the pivotal trials already completed, discuss the current controversies and complexities in the treatment decision-making, and postulate on what likely lies ahead. This paper will highlight the complexities of decision-making optimal treatment recommendations for patients with symptomatic and asymptomatic carotid stenosis.

ANTIKOAGULANTAI

- Pasikartojantys kraujagysliniai įvykiai (1.70, CI 1.12–2.59),
- Kraujavimo rizika (9.02, CI 3.91–20.84)
- Kraujagysliniai įvykiai ar IKH (2.30, CI 1.58–3.53)
- Mirtis nuo kt. priežas. (2.38, CI 1.31–4.32).

ANTIAGREGANTAI


INDIVIDUALUS BŪKLĖS ĮVERTINIMAS
NAUDOS IR RIZIKOS ĮVERTINIMAS
GERAS REZULTATAS