표적장기보호를 위해서 특정한 약제의 선택이 필요한가?; 필요없다!!!

김철호
서울대학교의과대학
내과학교실

약제의 선택

- 약제의 선택이 특별한 적응증이 없는 대상에서 표적장기손상의 차이를 야기하는가에 대한 논란은 끝났다
- 다만 이뇨제나 베타차단제가 가진 대사성 이상이 장기적으로 심혈관질환을 증가시킬 것인가에 대한 논란과 ACE억제제가 가진 대사이상 향상효과의 장기적인 효과는 향후 추시해야 한다
- 어떻게 하면 혈압을 목표치까지 강하할 것인가가 중요하다

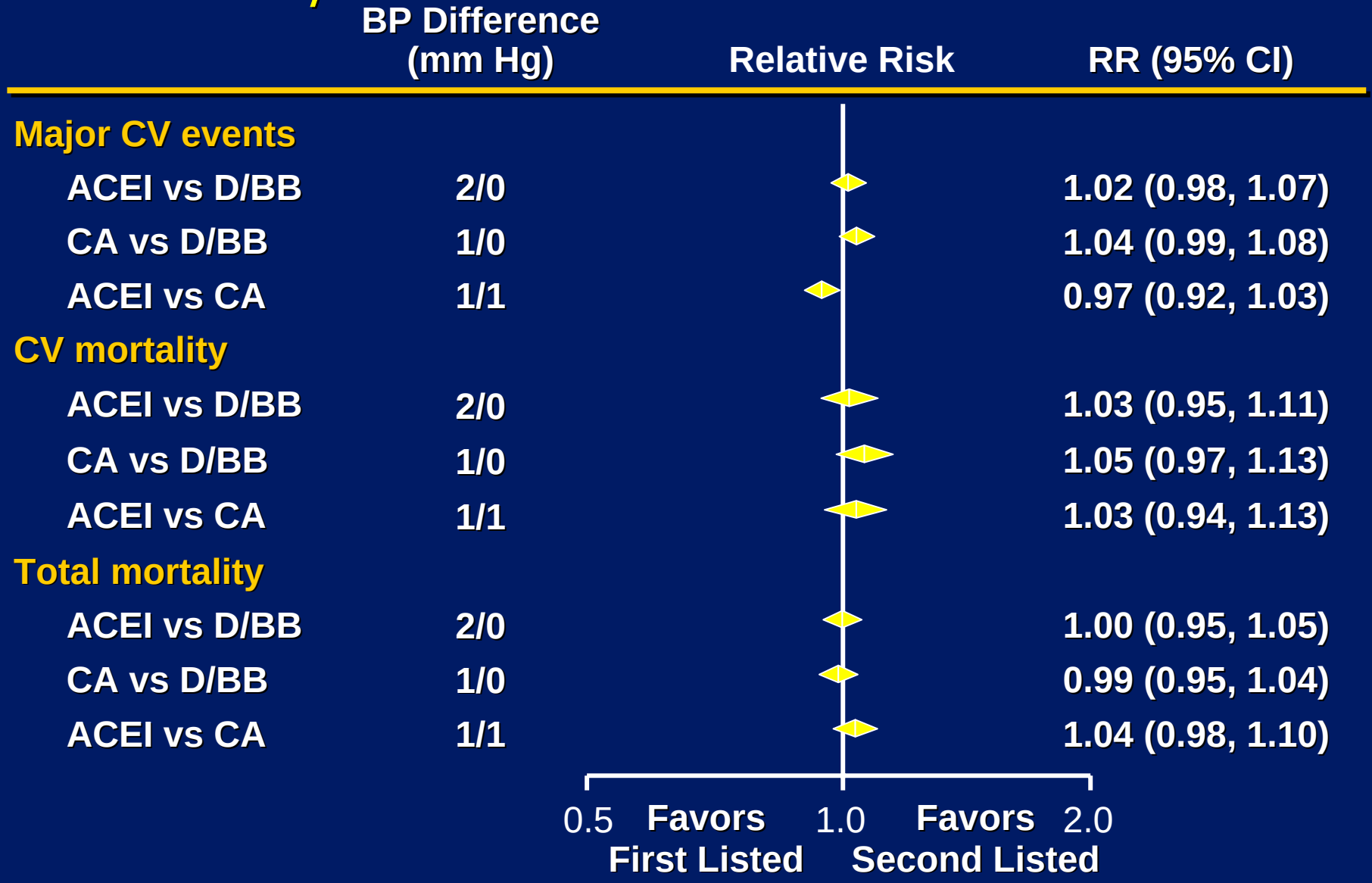
Factors to be considered

- Subjects: High risk or low risk
- Which methodology: individual vs meta-analysis

뇌졸중/관동맥질환과 혈압 치료

BP-Lowering Treatment Trialists

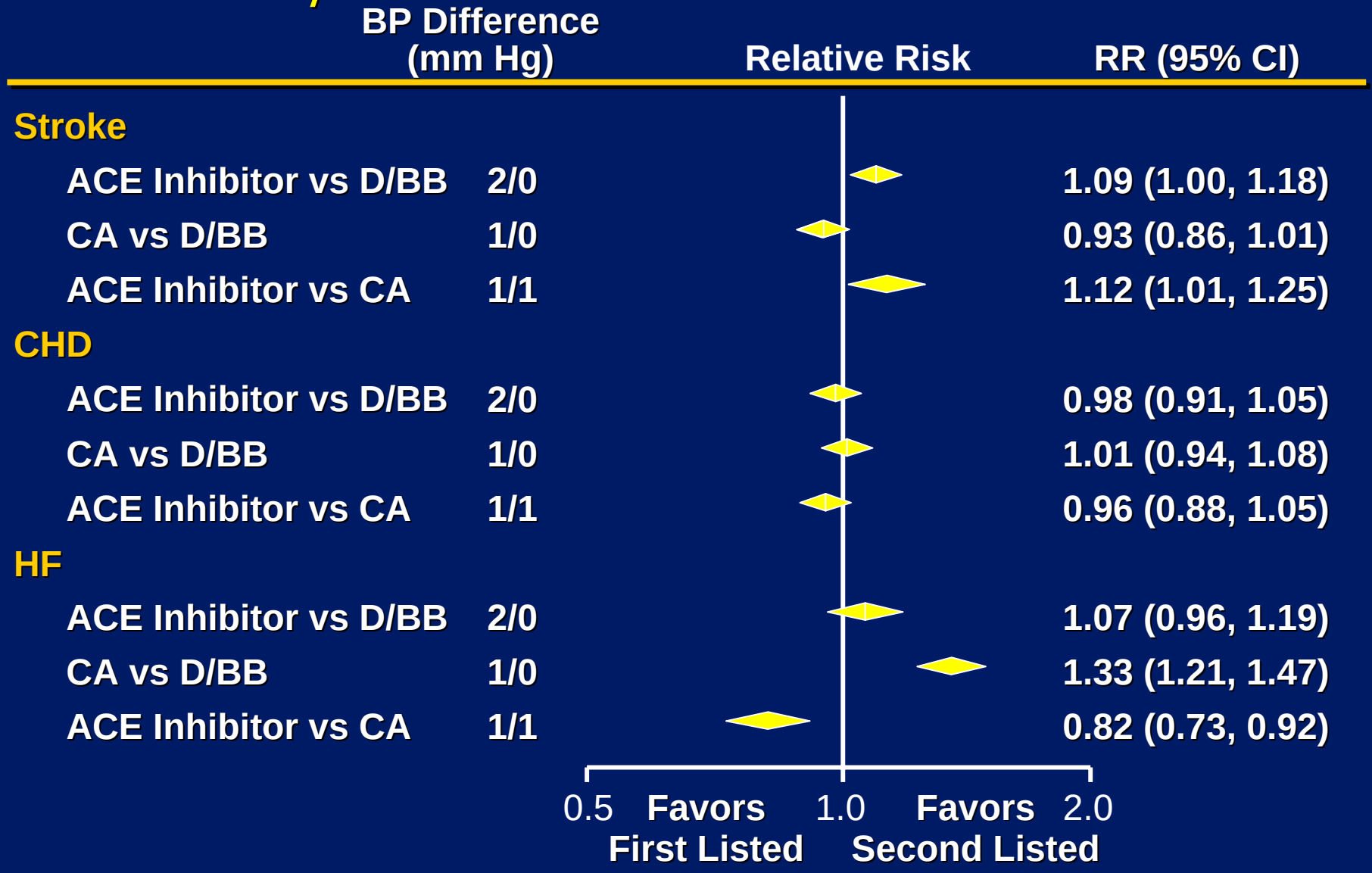
Comparisons of Different Active Treatments



Blood Pressure Lowering Treatment Trialists' Collaboration. *Lancet*. 2003;362:1527-1535.

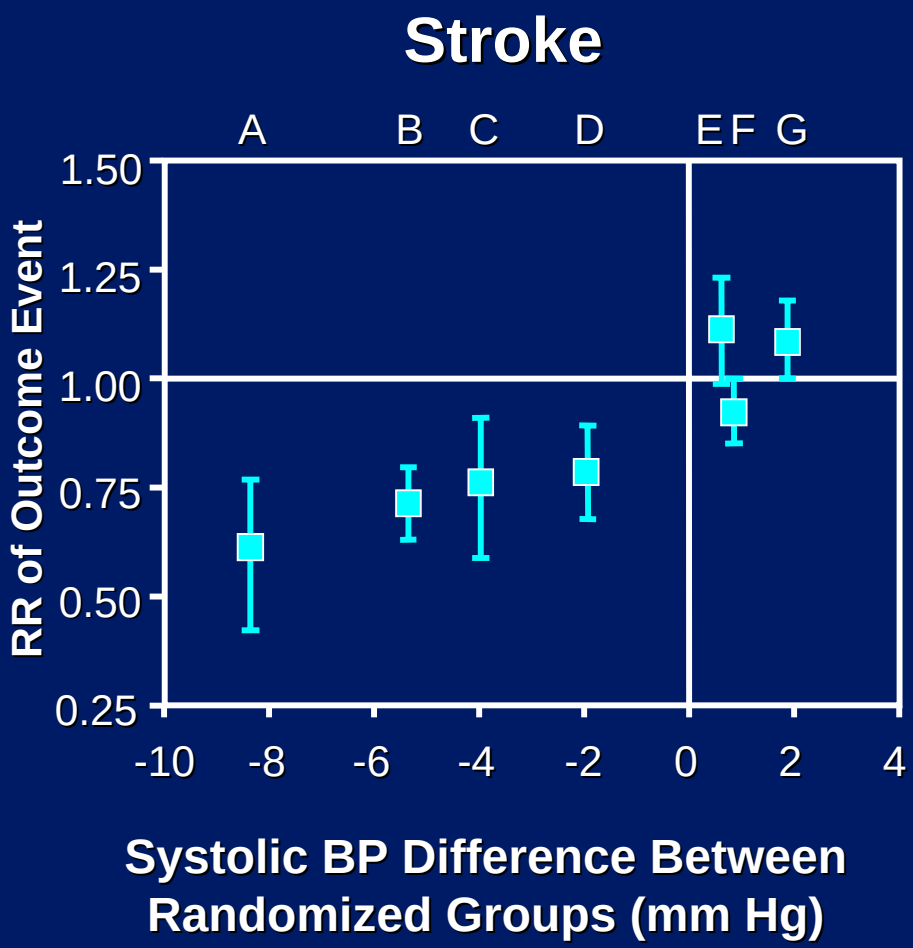
BP-Lowering Treatment Trialists

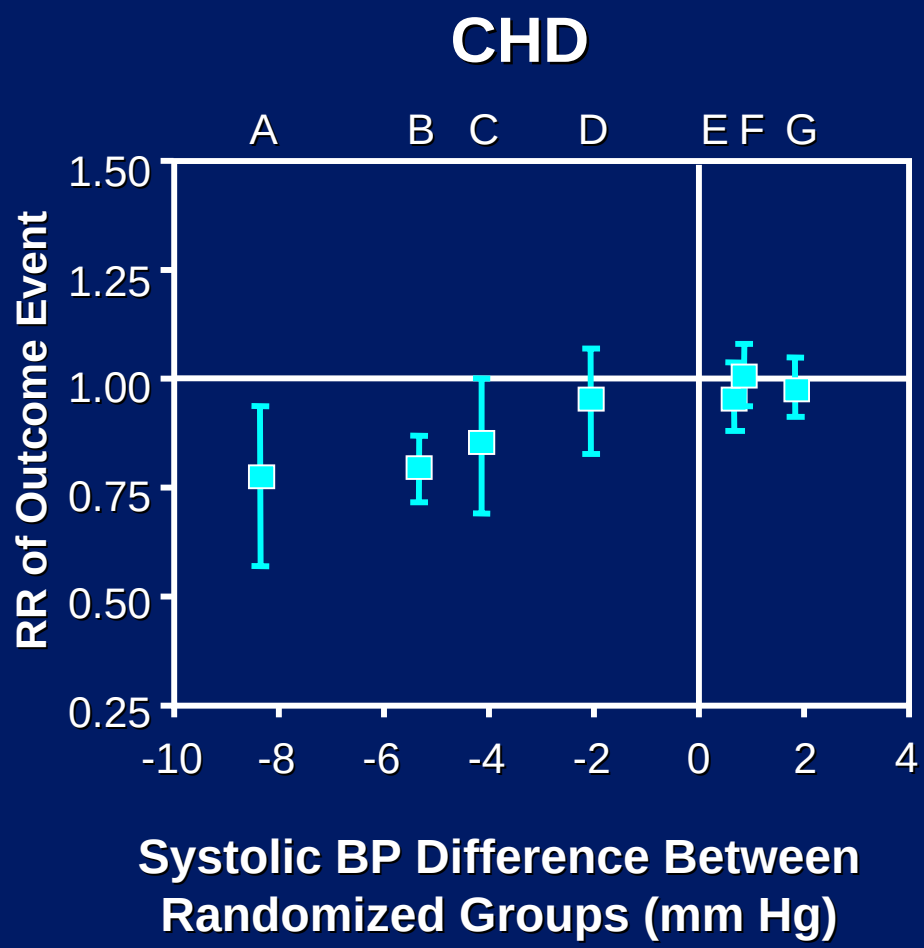
Comparisons of Different Active Treatments



Blood Pressure Lowering Treatment Trialists' Collaboration. *Lancet*. 2003;362:1527-1535.

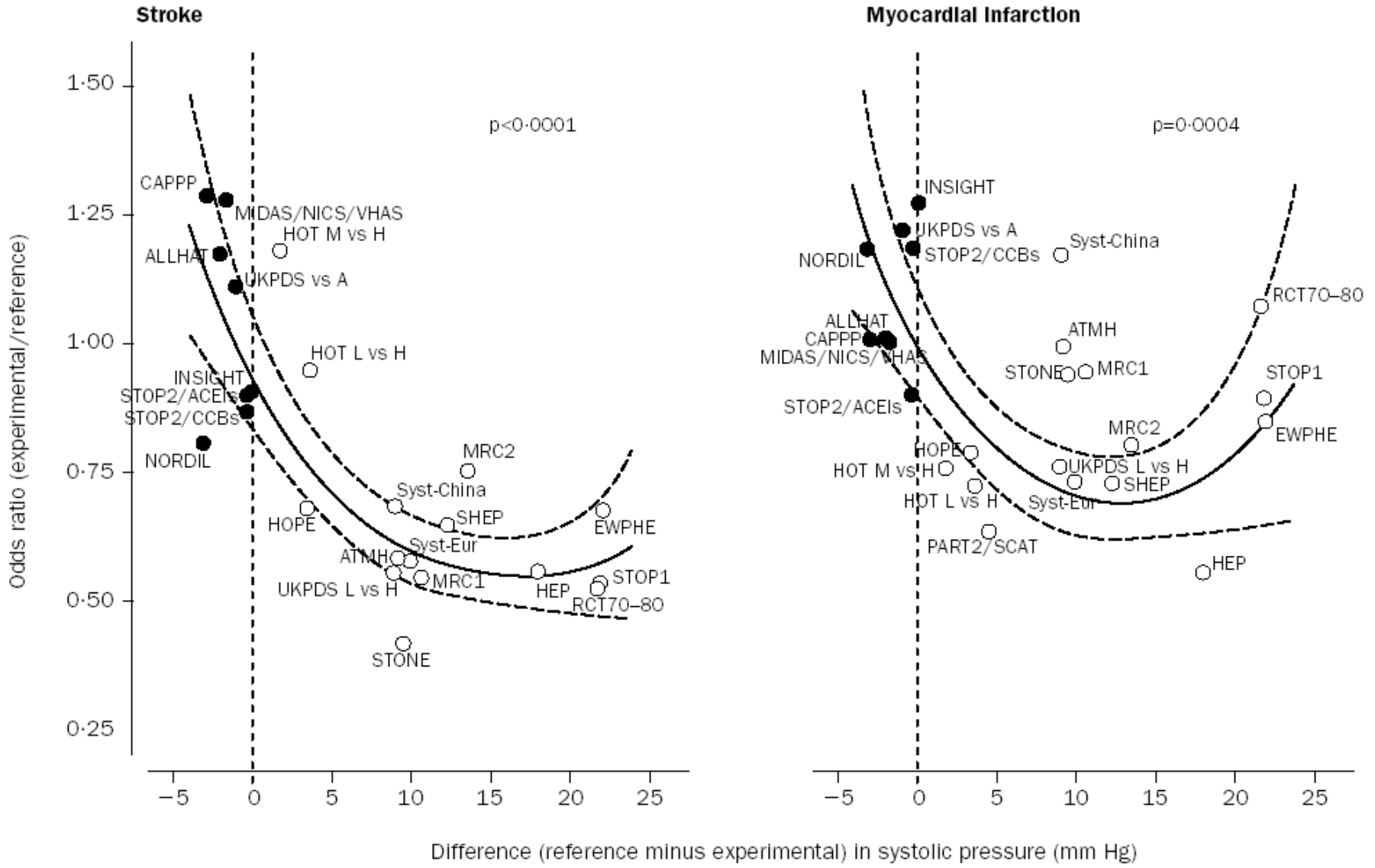
BP-Lowering Treatment Trialists



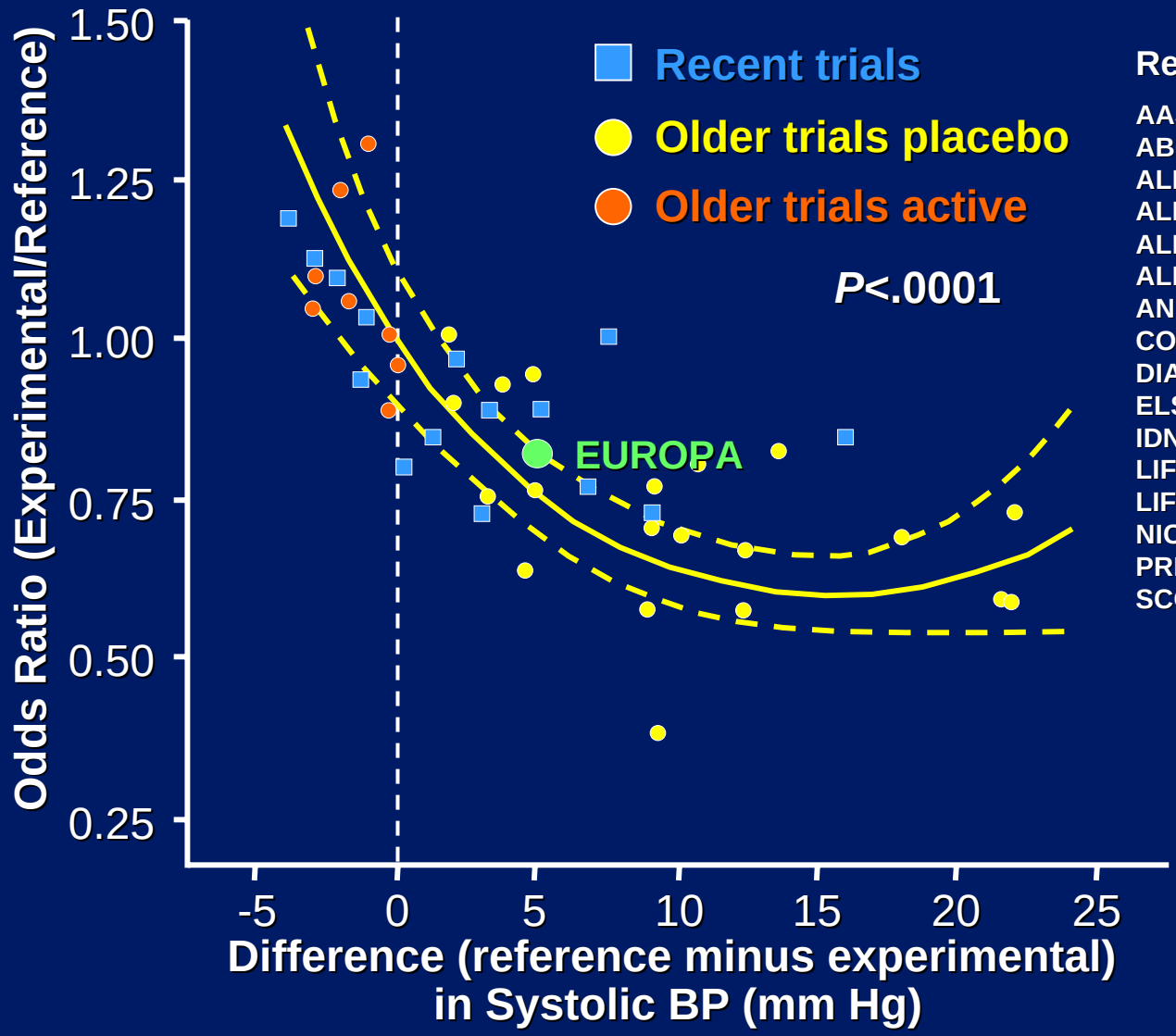


A = CA *vs* placebo; B = ACE inhibitor vs placebo; C = more intensive vs less intensive blood-pressure-lowering; D = ARB vs control; E = ACE inihibitor vs CA; F = CA vs diuretic or β-blocker; G = ACE inhibitor vs diuretic and β-blocker.

Blood Pressure Lowering Treatment Trialists' Collaboration. *Lancet*. 2003;362:1527-1535.

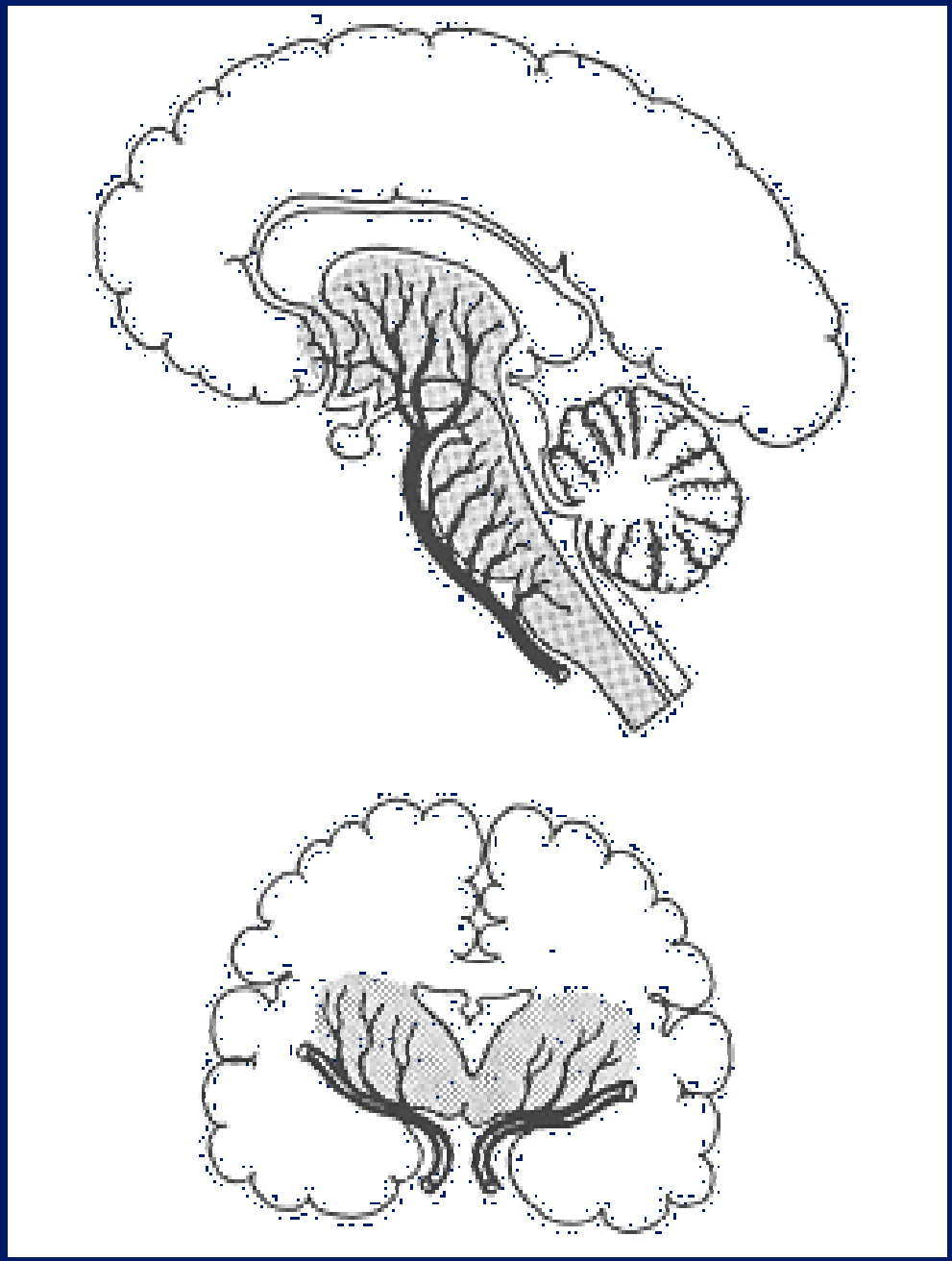

Stroke
p<0·0001
1·50
1·25
1·00
0·75
0·50
0·25
Odds ratio (experimental/reference)
CAPPP
MIDAS/NICS/VHAS
HOT M vs H
ALLHAT
UKPDS vs A
HOT L vs H
INSIGHT
STOP2/ACEIs
STOP2/CCBs
NORDIL
MRC2
Syst-China
HOPE
SHEP
EWPHE
Syst-Eur
ATMH
UKPDS L vs H
MRC1
HEP
STOP1
RCT70–80
STONE
−5
0
5
10
15
20
25
Myocardial Infarction
p=0·0004
INSIGHT
UKPDS vs A
Syst-China
NORDIL
STOP2/CCBs
RCT70–80
ALLHAT
ATMH
CAPPP
MIDAS/NICS/VHAS
STONE
MRC1
STOP1
STOP2/ACEIs
MRC2
EWPHE
HOPE
HOT M vs H
UKPDS L vs H
SHEP
HOT L vs H
Syst-Eur
PART2/SCAT
HEP
−5
0
5
10
15
20
25
Difference (reference minus experimental) in systolic pressure (mm Hg)

Odds Ratio for CV Events and Systolic BP Difference: Recent and Older Trials



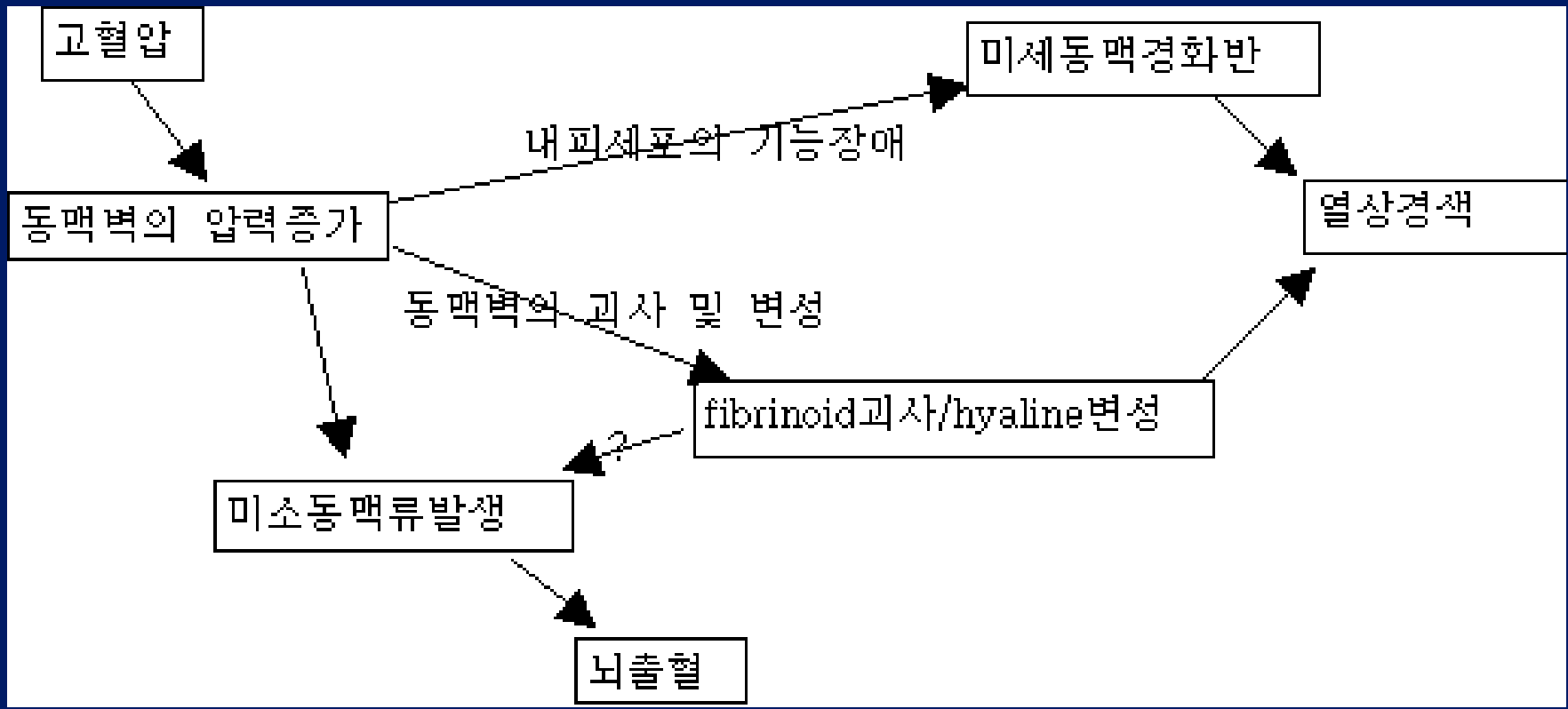
Recent	Older
AASK L vs H	ALLHAT/Dox
ABCD/NT L vs H	ATMH
ALLHAT/Aml	EWPHE
ALLHAT/Lis	HEP
ALLHAT/Lis ≥65	HOPE
ALLHAT/Lis Blcks	HOT
ANBP2	HOT M vs H
CONVINCE	INSIGHT
DIABHYCAR	MIDAS/NICS/VHAS
ELSA	L vs H
IDNT2	MRC
LIFE/ALL	MRC2
LIFE/DM	PART2/SCAT
NICOLE	PATS
PREVENT	PROGRESS/Per
SCOPE	PROGRESSION/Com
	RCT70-80
	RENAAL
	SHEP
	STONE
	STOP 1
	STOP2/CCBs
	STOP2/ACEIs
	Syst-China
	Syst-Eur
	UKPDS C vs A
	UKPDS L vs H

Fox. *Lancet.* 2003;362:782-788; Staessen et al. *J Hypertens*. 2003;21:1055-1076.



큰 동맥에서 갑자기 작은 동맥이 분지된다. 따라서 혈관벽에 비해서 큰 벽장력이 가해진다

고혈압과 소동맥의 변화


고혈압
미세동맥경화반
내피세포의 기능장애
동맥벽의 압력증가
열상경색
동맥벽의 괴사 및 변성
fibrinoid괴사/hyaline변성
?
미소동맥류발생
뇌출혈

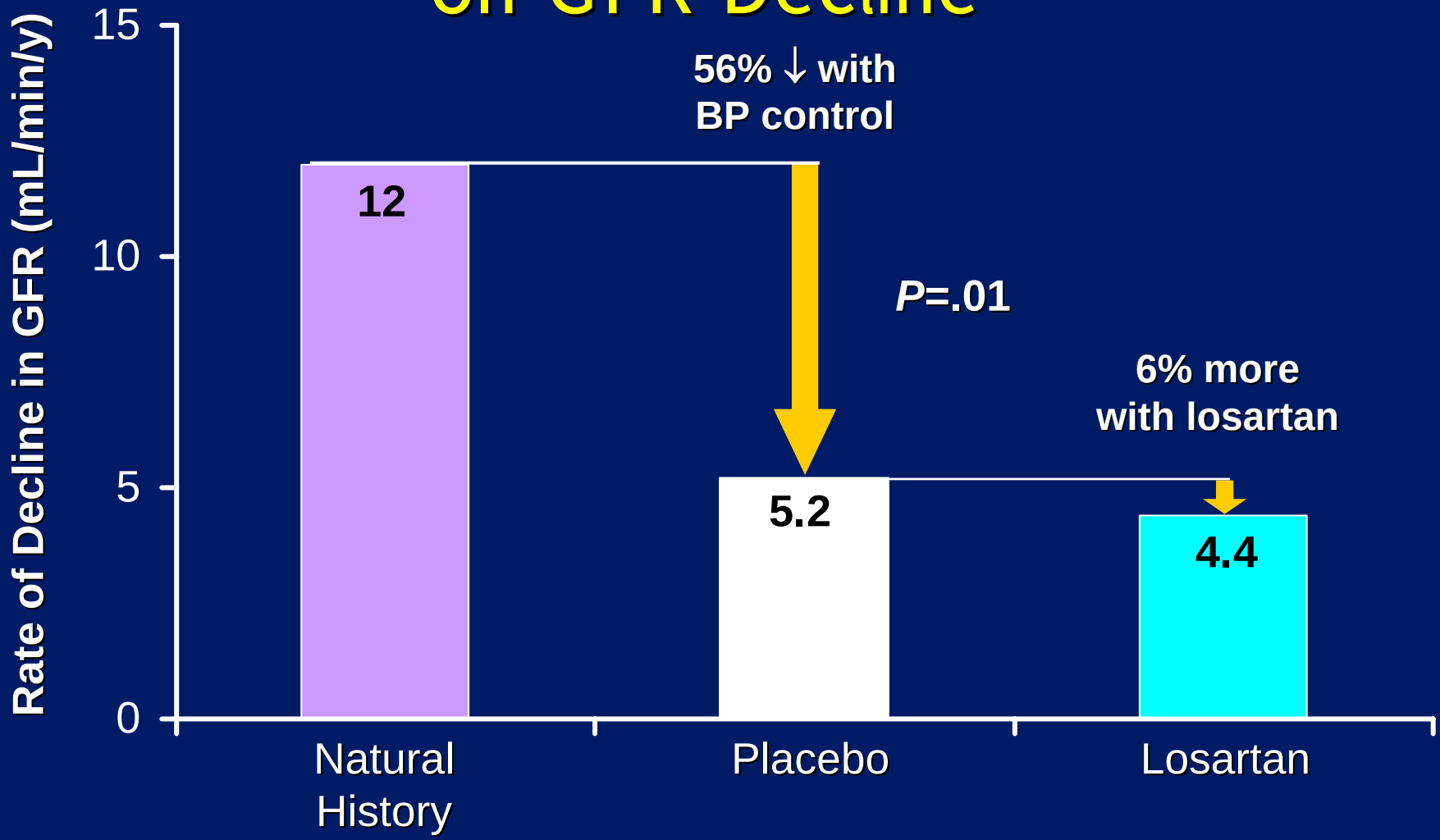
신장보호와 혈압치료

End-Stage Renal Disease or 50% Decline in GFR

Diabetics vs Non-Diabetics

	Chlorthal.		Amlod.	Lisin.
Total	3.2%		2.8%	3.3%
Diabetics	5.0%		4.9%	5.2%
Non-Diabetics	2.2%	↔ 0.73 p=0.01	1.6%	2.3%

RENAAL: Effect of BP Control, ARB on GFR Decline



GFR=glomerular filtration rate.

Bakris et al. *Am J Kidney Dis*. 2000;36:646-661; Brenner et al. *N Engl J Med*. 2001;345:861-869.

결론

- 강압 효과>>약제의 특이효과
- 혈압을 조절하는 것이 중요
- 고 위험군에서는 특히 중요하며 병합요법이 중요
- 일반적인 고혈압의 경우에 표적장기 손상을 감소시키기 위해서 특별한 약제의 선택은 필요하지 않다