

Surveillance du traitement antihypertenseur chez le sujet âgé

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Déclaration de conflit d'intérêt

- Honoraires pour conférences + contrat de recherche :
 - Lundbec, Merck Frosst, Elli Lilly, Servier, GSK.

Plan de la présentation

- Épidémiologie
- Point à surveiller dans le suivi du traitement de l'HTA:
 - Atteinte de la cible thérapeutique
 - Protection rénale
 - Adhérence au traitement
- Conclusion

Épidémiologie de l'HTA

- Problème fréquent dans la population âgée
- >50% dans la population >70 ans
- Progression surtout de la systolique dans la population très âgée

2009 Canadian Hypertension Education Program recommendations: The scientific summary – an annual update

Norman RC Campbell MD¹, Nadia A Khan MD MSc², Michael D Hill MD MSc³, Guy Tremblay MD⁴,
Marcel Lebel MD⁵, Janusz Kaczorowski BA MA PhD⁶, Finlay A McAlister MD MSc⁷, Richard Z Lewanczuk MD PhD⁸,
Sheldon Tobe MD⁹; on behalf of the Canadian Hypertension Education Program

TABLE 2
Target values for blood pressure

Setting	Target (mmHg)
Home	
Home blood pressure and daytime ambulatory blood pressure measurement*	<135/85
Office	
Diastolic \pm systolic hypertension	<140/90
Isolated systolic hypertension	<140
Diabetes	<130/80
Chronic kidney disease	<130/80

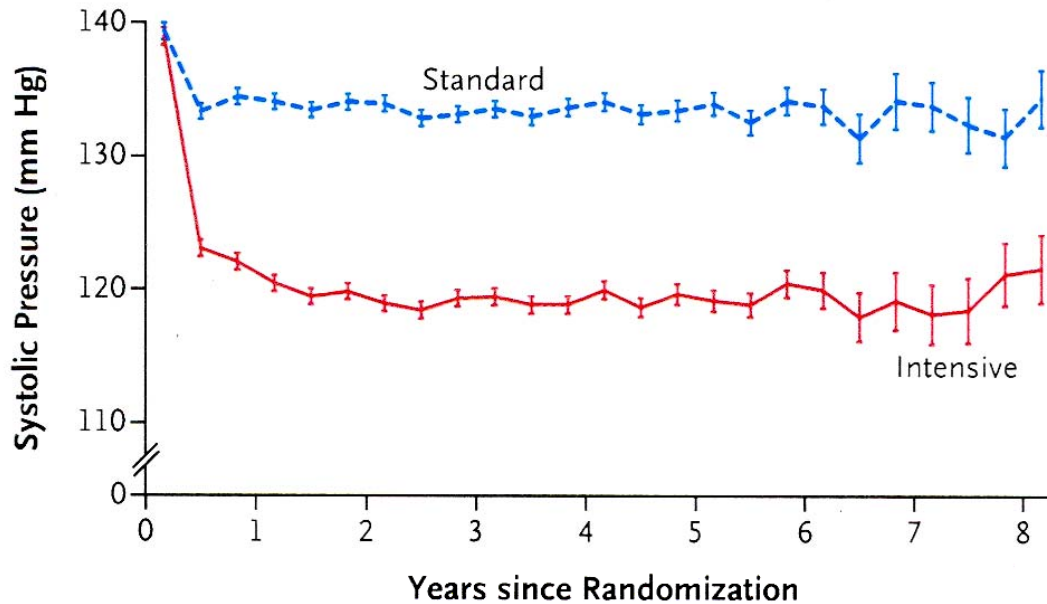
**The target value readings taken by home measurement and ambulatory blood pressure monitoring in those with diabetes or chronic kidney disease have not been established. Reprinted with permission from the Canadian Hypertension Education Program*

Tension artérielle à la fin des grandes études dans le groupe actif

- Syst-Eur : 153/77
- SHEP : 147/78
- HYVET : 140/76

ACCORD HTA

- 4733 participants avec diabète de type 2
- Randomisation:
 - TA syst <140 vs TA <120



Mean No. of Medications Prescribed

Intensive	3.2	3.4	3.4	3.5	3.5	3.5	3.4	3.4
Standard	1.9	2.1	2.1	2.2	2.2	2.3	2.3	2.3

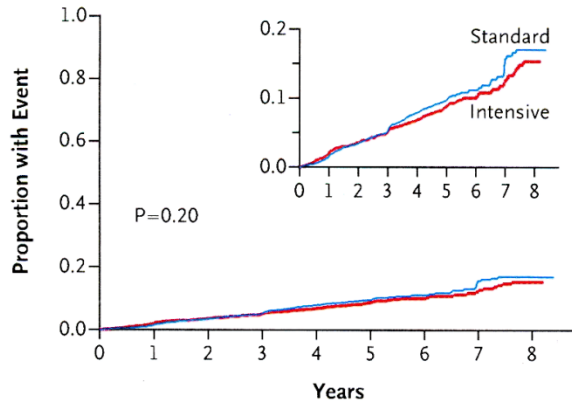
No. of Patients

Intensive	2174	2071	1973	1792	1150	445	156	156
Standard	2208	2136	2077	1860	1241	504	203	201

Figure 1. Mean Systolic Blood-Pressure Levels at Each Study Visit.

I bars indicate 95% confidence intervals.

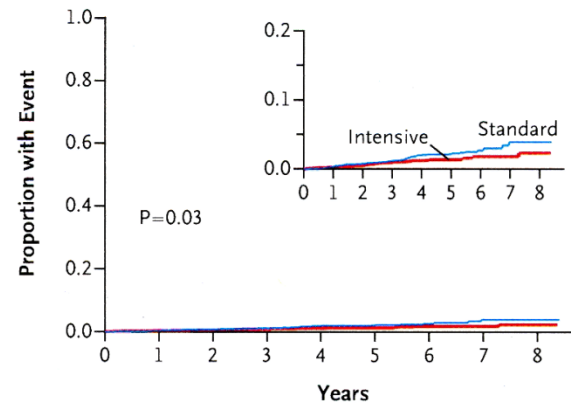
A Primary Outcome



No. at Risk

Intensive	2362	2273	2182	2117	1770	1080	298	175	80
Standard	2371	2274	2196	2120	1793	1127	358	195	108

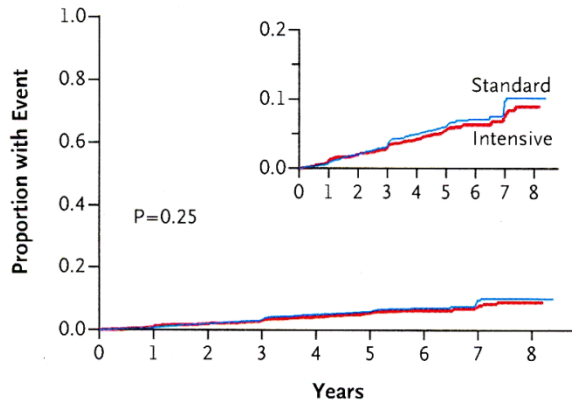
B Nonfatal Stroke



No. at Risk

Intensive	2362	2291	2223	2174	1841	1128	313	186	88
Standard	2371	2287	2235	2186	1879	1196	382	215	114

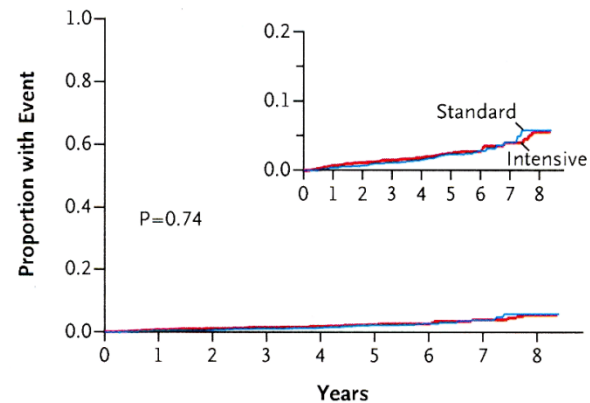
C Nonfatal Myocardial Infarction



No. at Risk

Intensive	2362	2278	2190	2133	1787	1087	299	177	82
Standard	2371	2278	2208	2141	1818	1145	365	201	112

D Death from Cardiovascular Disease



No. at Risk

Intensive	2362	2304	2252	2201	1870	1143	317	188	91
Standard	2371	2313	2268	2218	1922	1220	393	221	118

Figure 2. Kaplan–Meier Analyses of Selected Outcomes.

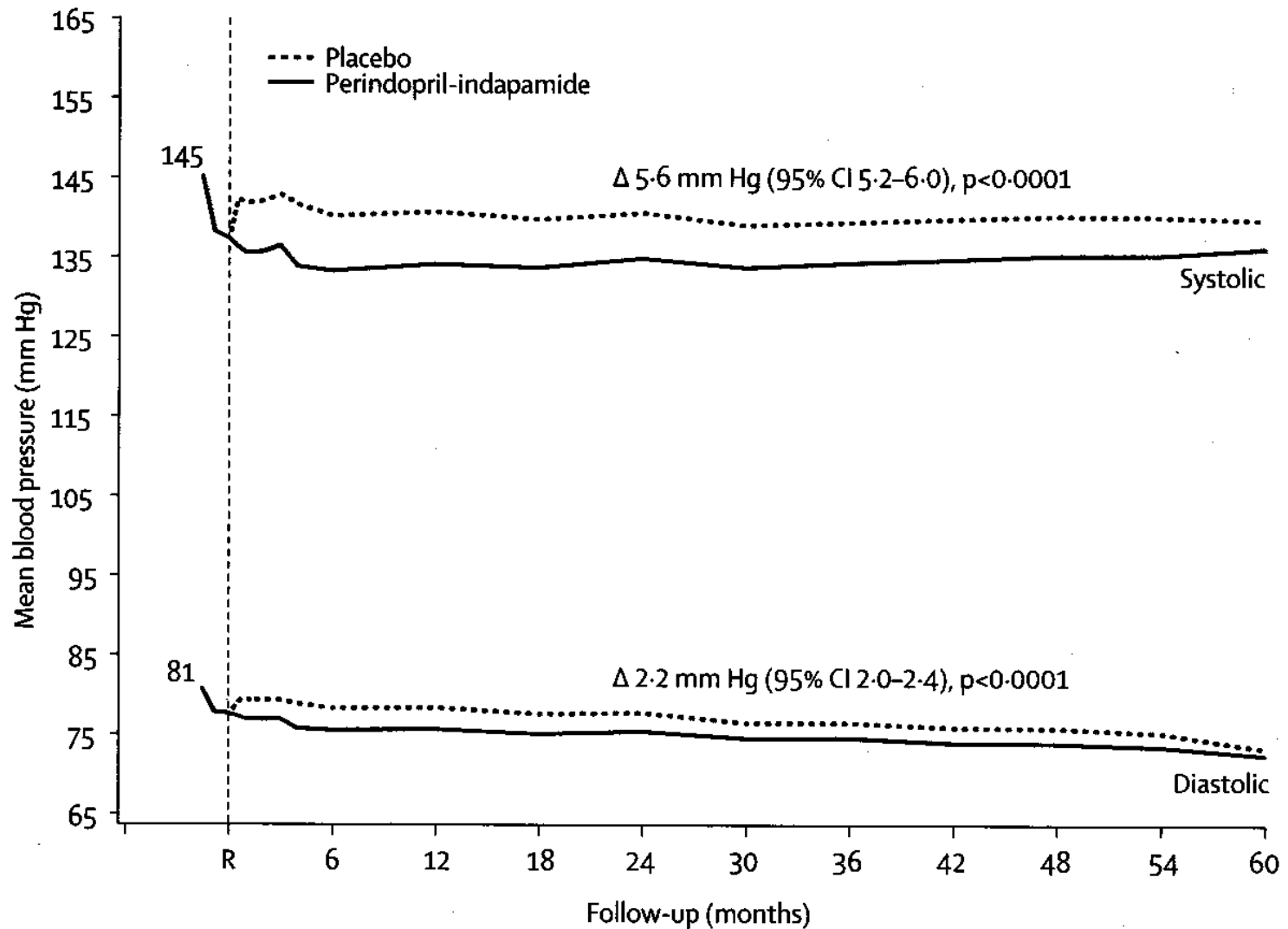
Shown are the proportions of patients with events for the primary composite outcome (Panel A) and for the individual components of the primary outcome (Panels B, C, and D). The insets show close-up versions of the graphs in each panel.

ADVANCE HTA

- 11140 patients avec diabète de type 2
- Âge moyen : 66 ± 6
- TA au départ 145/81
- TA à la fin de l'étude:
 - 135/75 groupe intensif
 - 140/77 groupe usuel

Lowering Blood Pressure Reduces Renal Events in Type 2 Diabetes

Bastiaan E. de Galan,^{*†} Vlado Perkovic,^{*} Toshiharu Ninomiya,^{*} Avinesh Pillai,^{*}
Anushka Patel,^{*} Alan Cass,^{*} Bruce Neal,^{*} Neil Poulter,[‡] Stephen Harrap,[§]
Carl-Erik Mogensen,^{||} Mark Cooper,[¶] Michel Marre,^{**} Bryan Williams,^{††} Pavel Hamet,^{‡‡}
Giuseppe Mancia,^{§§} Mark Woodward,^{*} Paul Glasziou,^{|||} Diederick E. Grobbee,^{¶¶}
Stephen MacMahon,^{*} and John Chalmers,^{*}
on behalf of the ADVANCE Collaborative Group






Placebo	137/78	140/78	141/78	140/78	141/78	139/77	139/77	140/76	140/76	140/75	140/73
Per-ind	137/78	133/76	134/76	134/75	135/75	134/75	134/75	135/74	135/74	135/74	136/73

Table 2. Concomitant BP-lowering treatment at the end of follow-up^a

Variable	End of Follow-up (n [%])	
	Perindopril-Indapamide	Placebo
Open-label perindopril	2128 (44.5)	2591 (54.9)
Other ACEIs	232 (4.9)	213 (4.5)
ARBs	453 (9.5)	618 (13.1)
β blockers	1492 (31.2)	1671 (35.4)
Calcium antagonists	1531 (32.0)	2040 (43.2)
Thiazide diuretics	158 (3.3)	217 (4.6)
Other diuretics	673 (14.1)	749 (15.9)
Other BP-lowering drugs	463 (9.7)	638 (13.5)
Any BP-lowering drugs	3634 (74.0)	4024 (82.7)

Table 4. Incidence of renal end points^a

End Point	Perindopril- Indapamide (No. of Events/Patient [%])	Placebo	HR (95% CI)	P	NNT
Progression of nephropathy					
all renal events	1243/5569 (22.3)	1500/5571 (26.9)	0.79 (0.73 to 0.85)	<0.0001	20
progression of ≥ 1 albuminuria stage	1179/5436 (21.7)	1442/5412 (26.6)	0.78 (0.72 to 0.84)	<0.0001	18
new-onset microalbuminuria	1094/3995 (27.4)	1317/3991 (33.0)	0.79 (0.73 to 0.86)	<0.0001	16
new-onset macroalbuminuria	114/5436 (2.1)	163/5412 (3.0)	0.69 (0.54 to 0.88)	0.0027	97
patients with normoalbuminuria	25/3995 (0.6)	35/3991 (0.9)	0.71 (0.42 to 1.18)	0.1841	NA
patients with microalbuminuria	89/1441 (6.2)	128/1421 (9.0)	0.69 (0.52 to 0.91)	0.0074	32
doubling of serum creatinine >200 $\mu\text{mol/L}$	55/5569 (1.0)	45/5571 (0.8)	1.21 (0.81 to 1.79)	0.3483	NA
end-stage kidney disease ^b	25/5569 (0.4)	21/5571 (0.4)	1.18 (0.66 to 2.11)	0.5736	NA
Regression of nephropathy					
regression of ≥ 1 albuminuria stage	908/1638 (55.4)	816/1625 (50.2)	1.16 (1.06 to 1.28)	0.0017	19
regression to normoalbuminuria	848/1638 (51.8)	745/1625 (45.8)	1.15 (1.04 to 1.27)	0.0059	16
patients with microalbuminuria	797/1441 (55.3)	698/1421 (49.1)	1.15 (1.04 to 1.27)	0.0067	16
patients with macroalbuminuria	51/197 (25.9)	47/204 (23.0)	1.08 (0.72 to 1.60)	0.7146	NA

	Number of events/ patients		Favors Per-Ind	Favors Placebo	Hazard ratio (95% CI)
	Per-Ind (n=5569)	Placebo (n=5571)			
All renal events	1243/ 5571	1500/ 5569			0.79 (0.73 to 0.85)
Age (years)					
≥65	732/ 3318	900/ 3295			0.76 (0.69 to 0.84)
<65	511/ 2251	600/ 2276			0.83 (0.74 to 0.93)

Combinaisons

- Éviter combinaison inhibiteur de l'enzyme de conversion de l'angiotensine (IECA) et un antagoniste des récepteurs de l'angiotensine (ARA)

Conditions particulières

- Phénomène de la blouse blanche
- HTA masquée
- HTO

Hypotension orthostatique

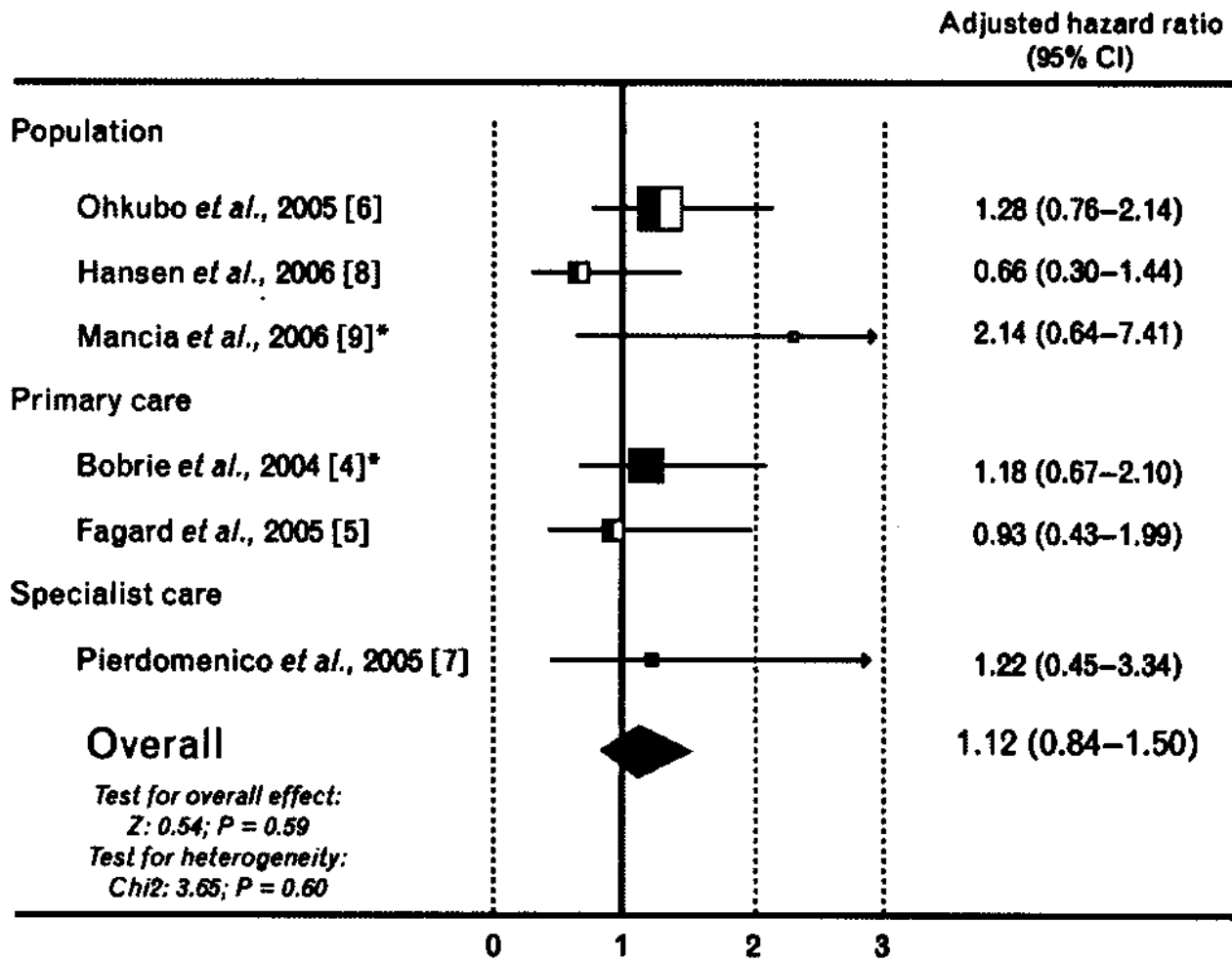
- Jusqu'à 20% des patients avec HTA
- Phénomène fluctuant
- Agents prédisposant : BCC, alpha-bloquants
- Documenter en cas de chute

Incidence of cardiovascular events in white-coat, masked and sustained hypertension versus true normotension: a meta-analysis

Robert H. Fagard and Véronique A. Cornelissen

Fig. 1

White-coat hypertension versus normotension



White coat hypertension is a cardiovascular risk factor: a 10-year follow-up study

PH Gustavsen, A Høegholm, LE Bang and KS Kristensen
Department of Internal Medicine, County Central Hospital, Næstved, Denmark

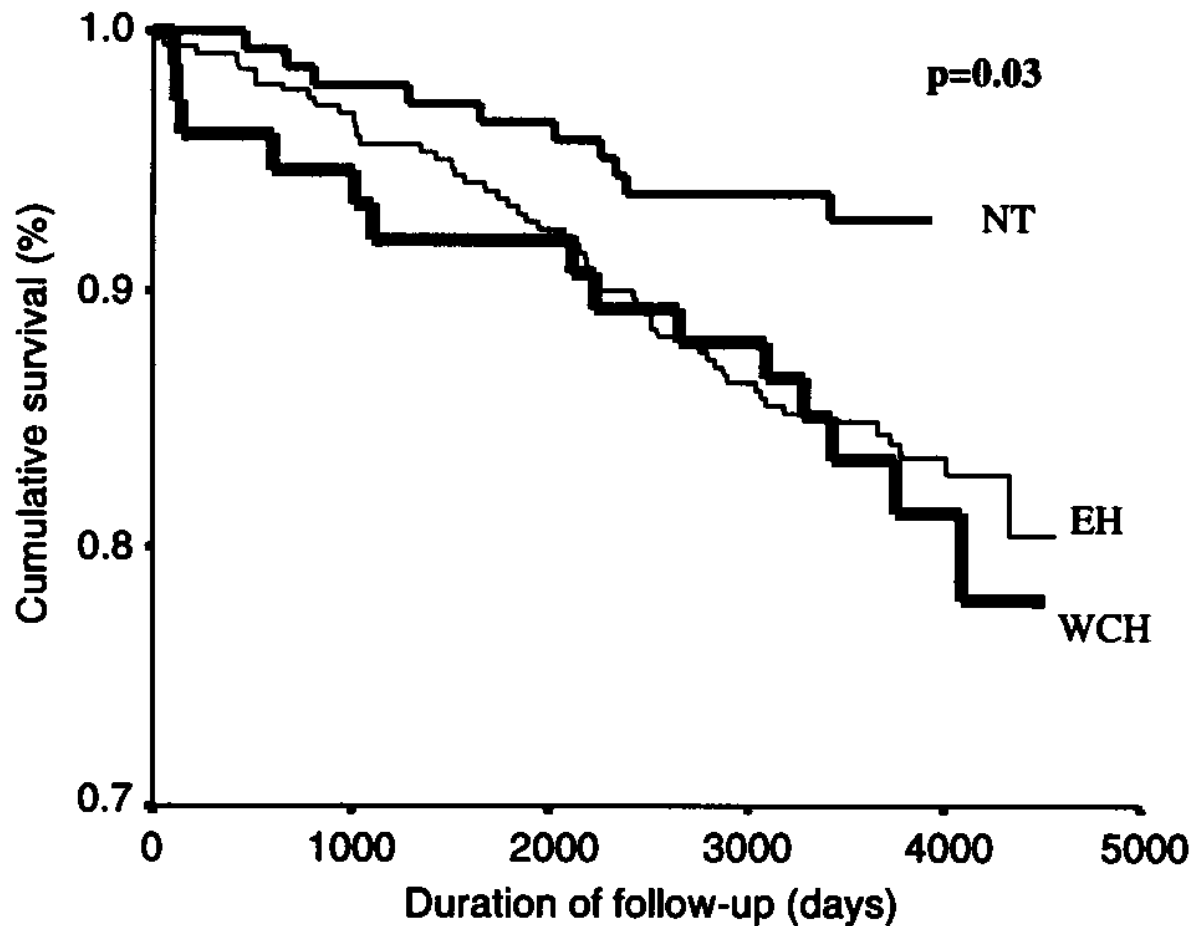


Figure 1 Kaplan–Meier survival curves of first cardiovascular events in the WCH, the EH and the NT groups ($P=0.03$, overall and between WCH and NT).

Adh rence au traitement

- Fonction de la tol rance des agents utilis s + fr quence des doses quotidiennes.
- Compliance moins bonne dans la population  g e?
- Attention : baisse tensionnelle excessive chez le patient r cemment admis   l'h pital

Conclusion

- Une cible thérapeutique avec systolique 130-140 est raisonnable chez le sujet âgé hypertendu
- Adapter la cible à chaque situation particulière
- Régime thérapeutique le plus simple possible
- Surveillance de la fonction rénale