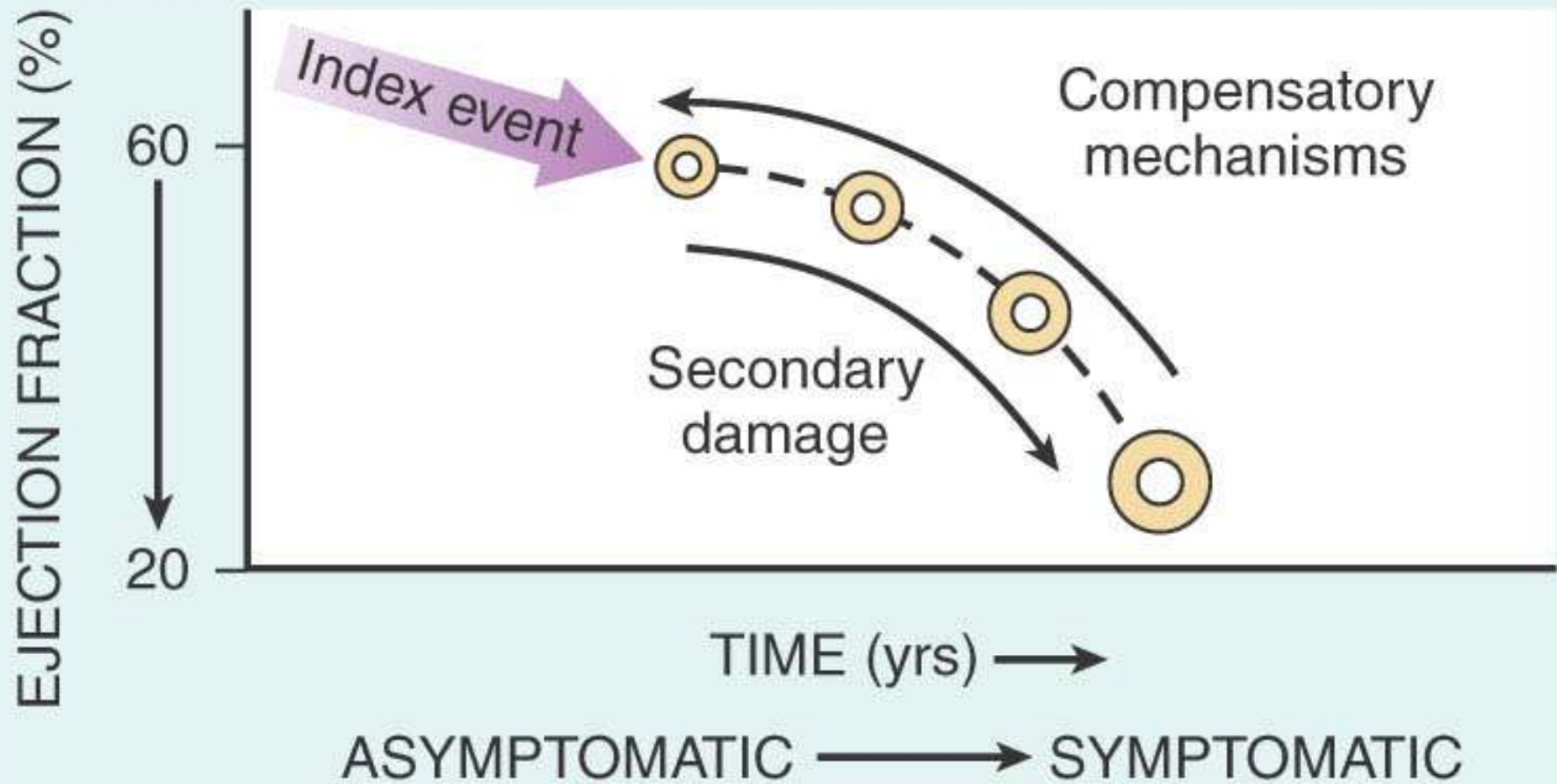


Srdcové zlyhávanie, súčasný diagnostický a liečebný prístup

Ján Murín,

I. interná klinika LF UK, Bratislava

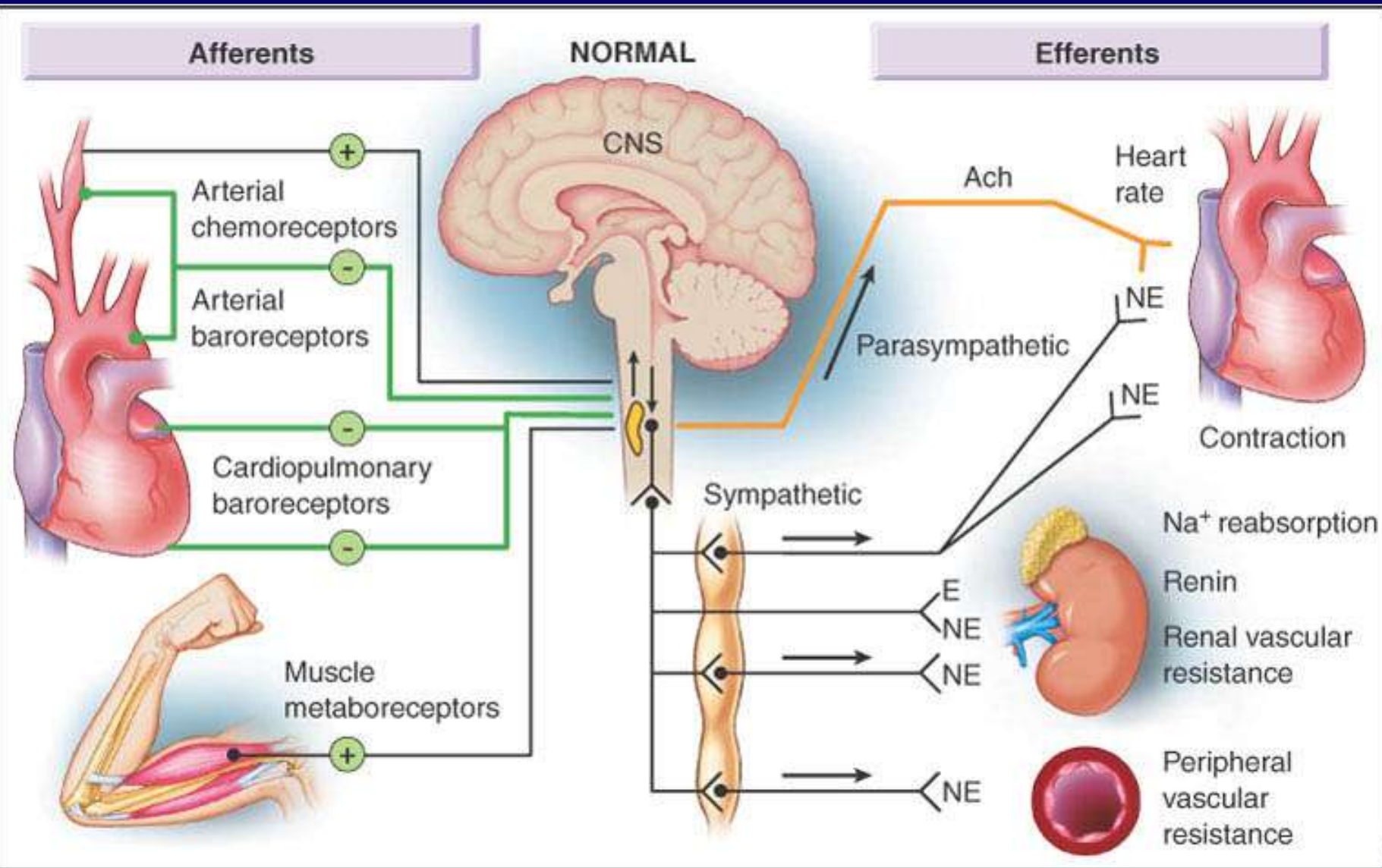
51. odborná konferencia SSVPL SLS, Bojnice 16. – 18. 10. 2008



(From Mann DL: Mechanisms and models in HF: A combinatorial approach. Circulation 100:99, 1999.)



A

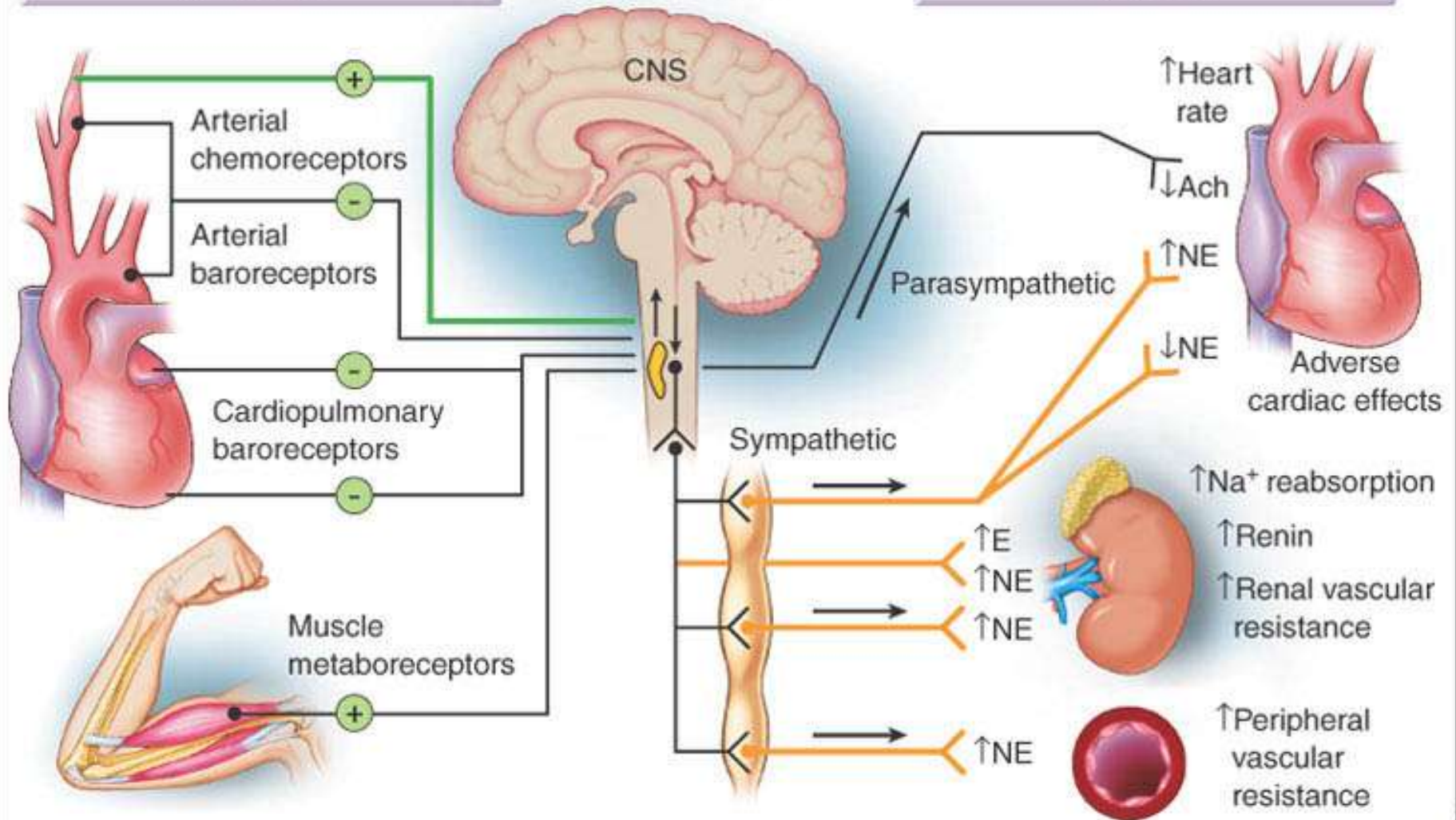


(From Floras JS: Alterations in the sympathetic and parasympathetic nervous system in HF. In Mann DL [ed]: Heart Failure: A Companion to Braunwald's Heart Disease. Philadelphia, Elsevier, 2004, pp 247-278.)

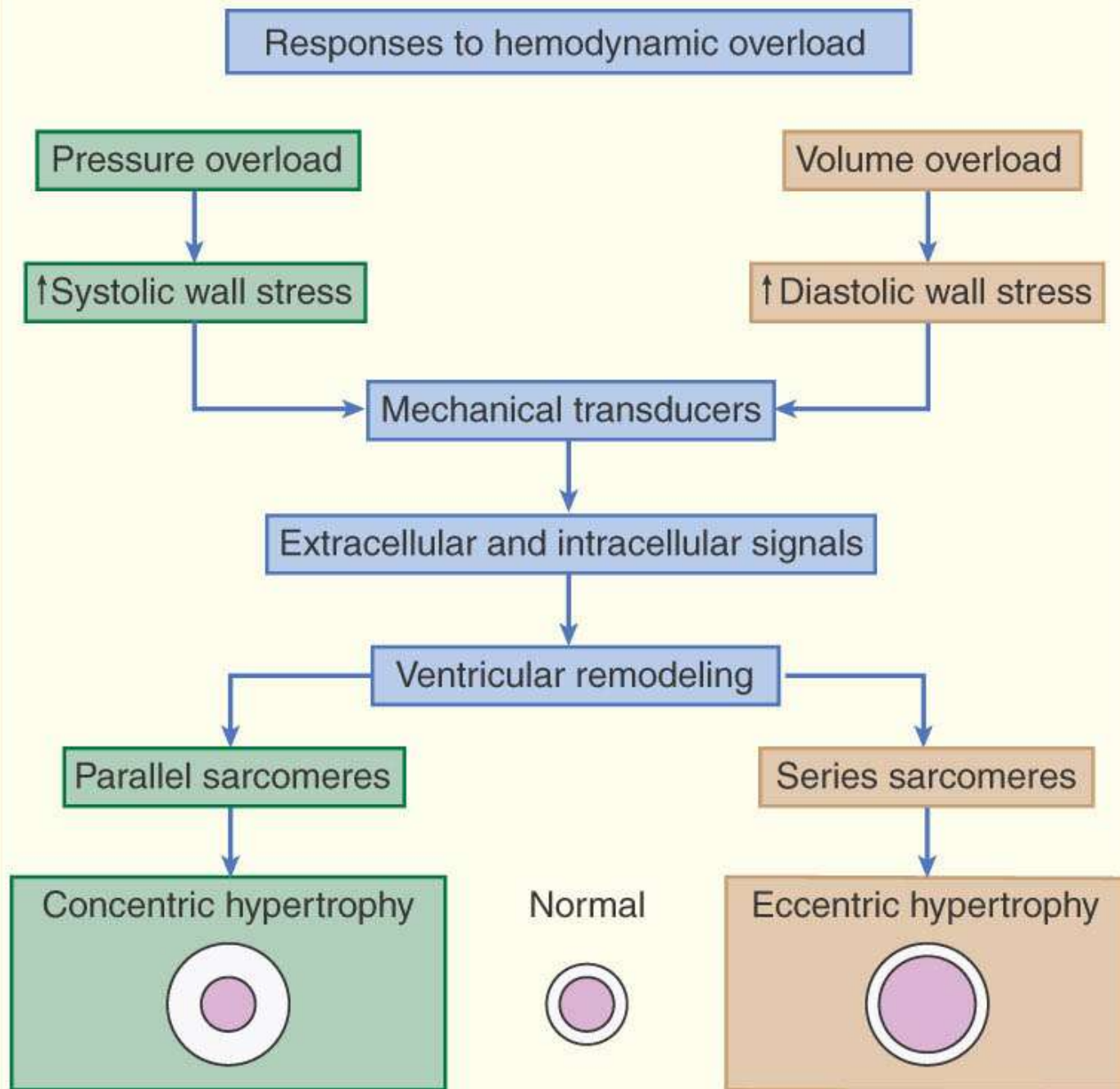
Afferents

HEART FAILURE

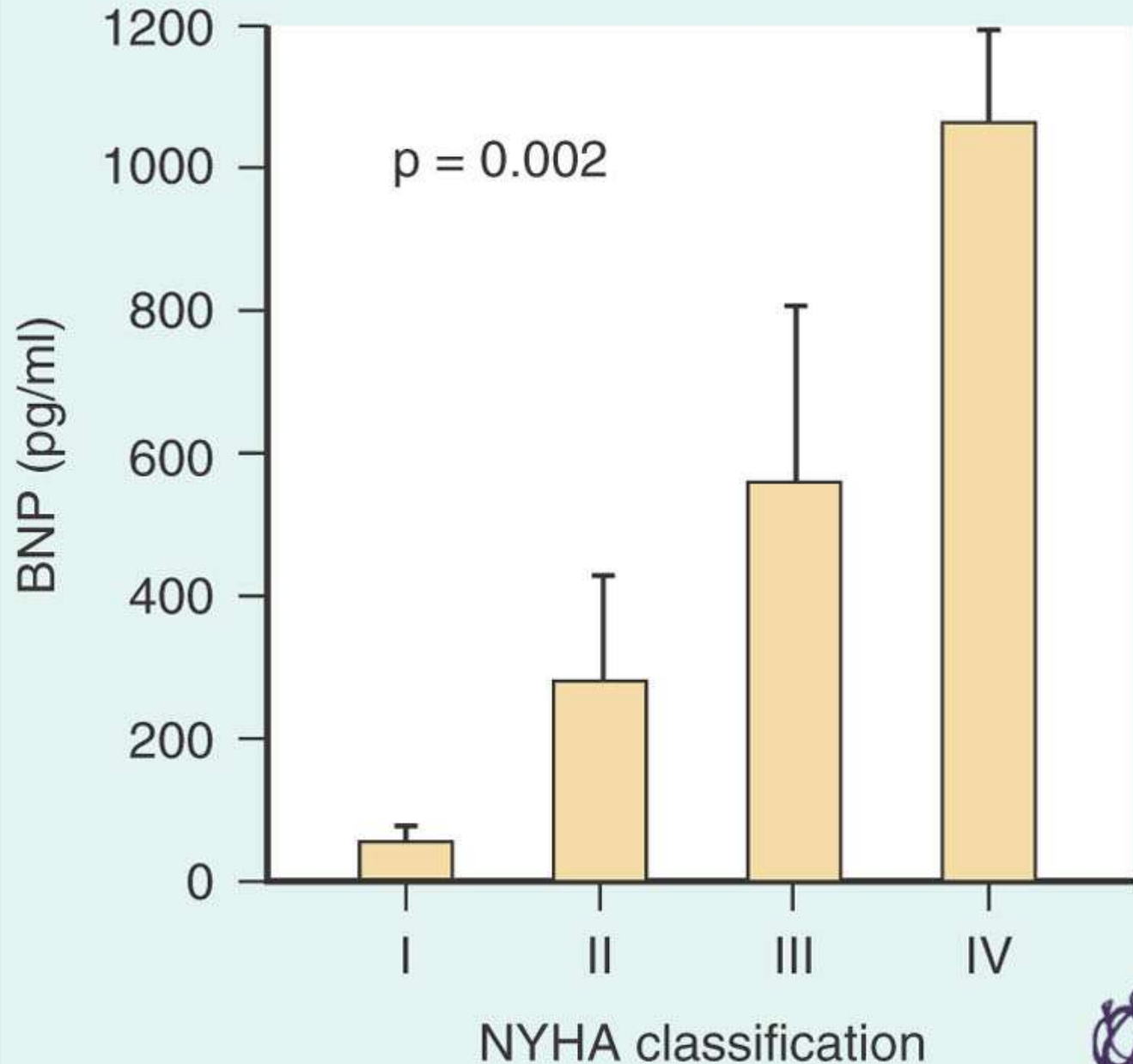
Efferents

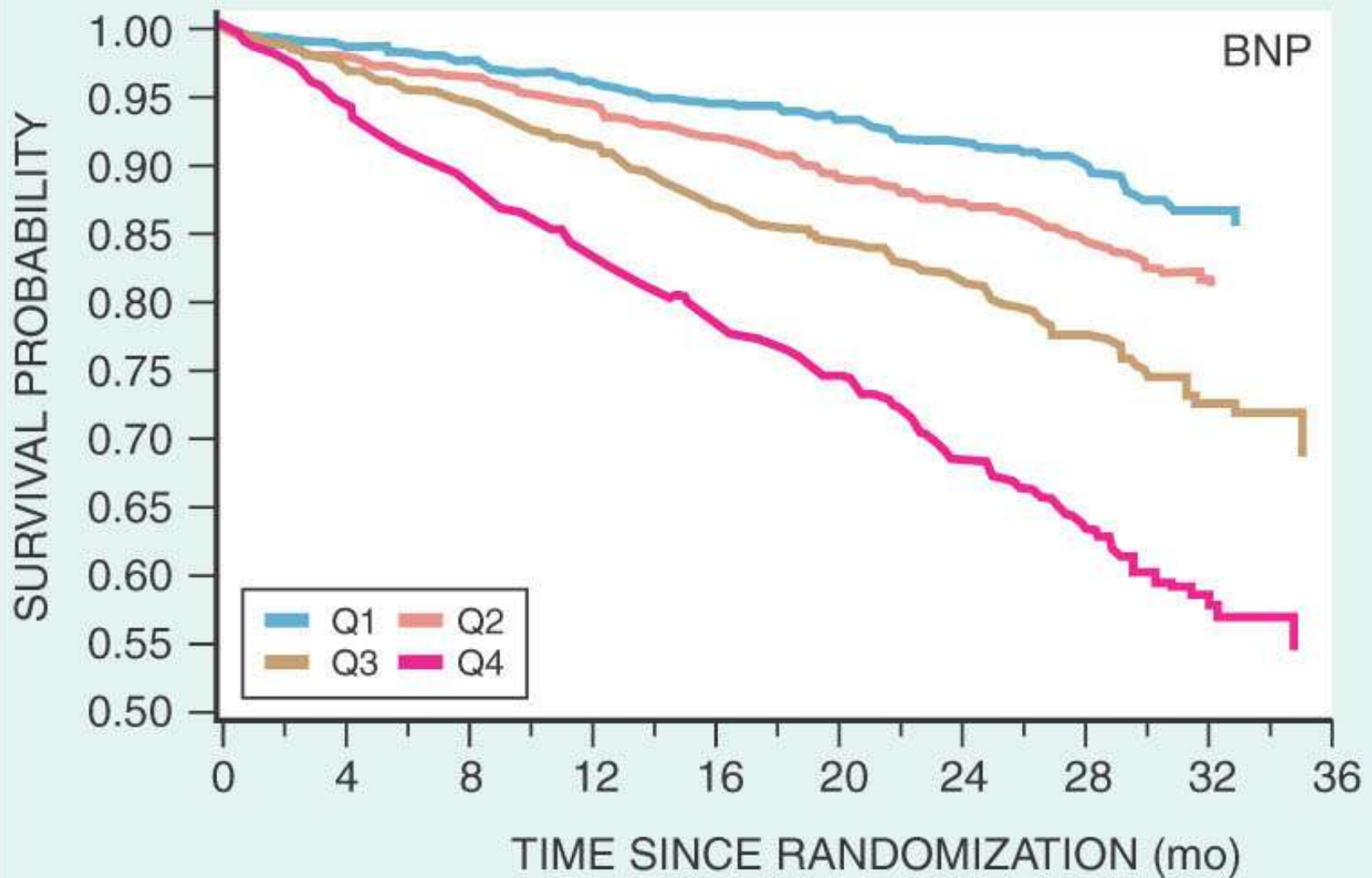


(From Floras JS: Alterations in the sympathetic and parasympathetic nervous system in HF. In Mann DL [ed]: Heart Failure: A Companion to Braunwald's Heart Disease. Philadelphia, Elsevier, 2004, pp 247-278.)



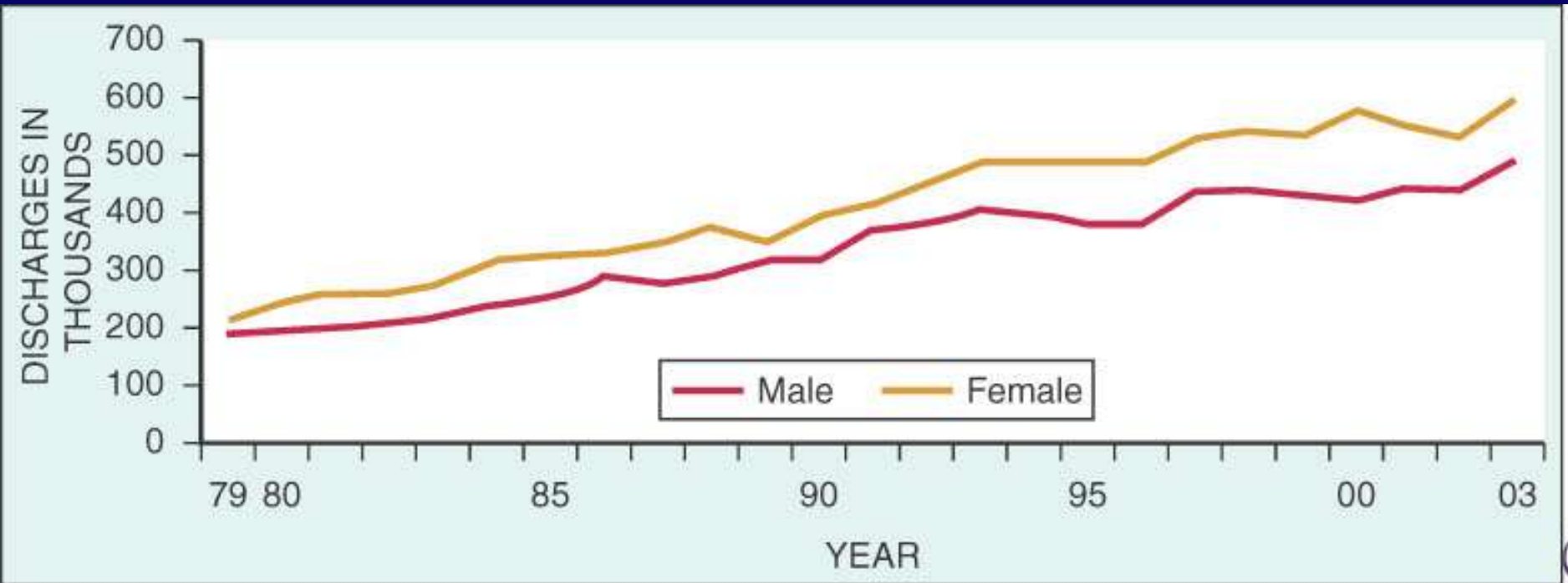
BNP AND NYHA CLASSIFICATION





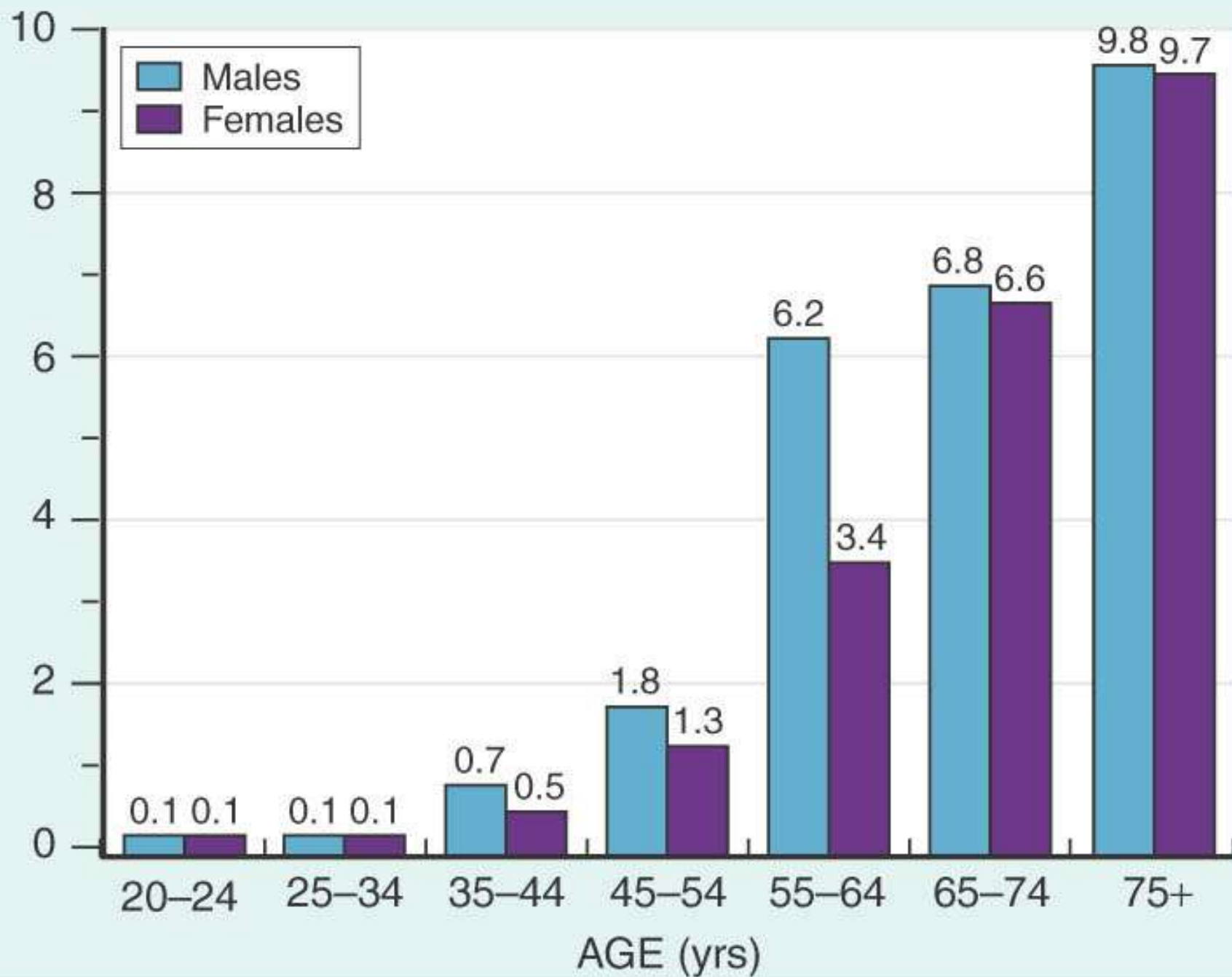
	Q1	Q2	Q3	Q4
BNP (pg/ml)	<41	41–<97	97–<238	≥238
Mortality (%)	9.7	14.3	20.7	32.4





© Copyright 2008 by Saunders, an imprint of Elsevier Inc.

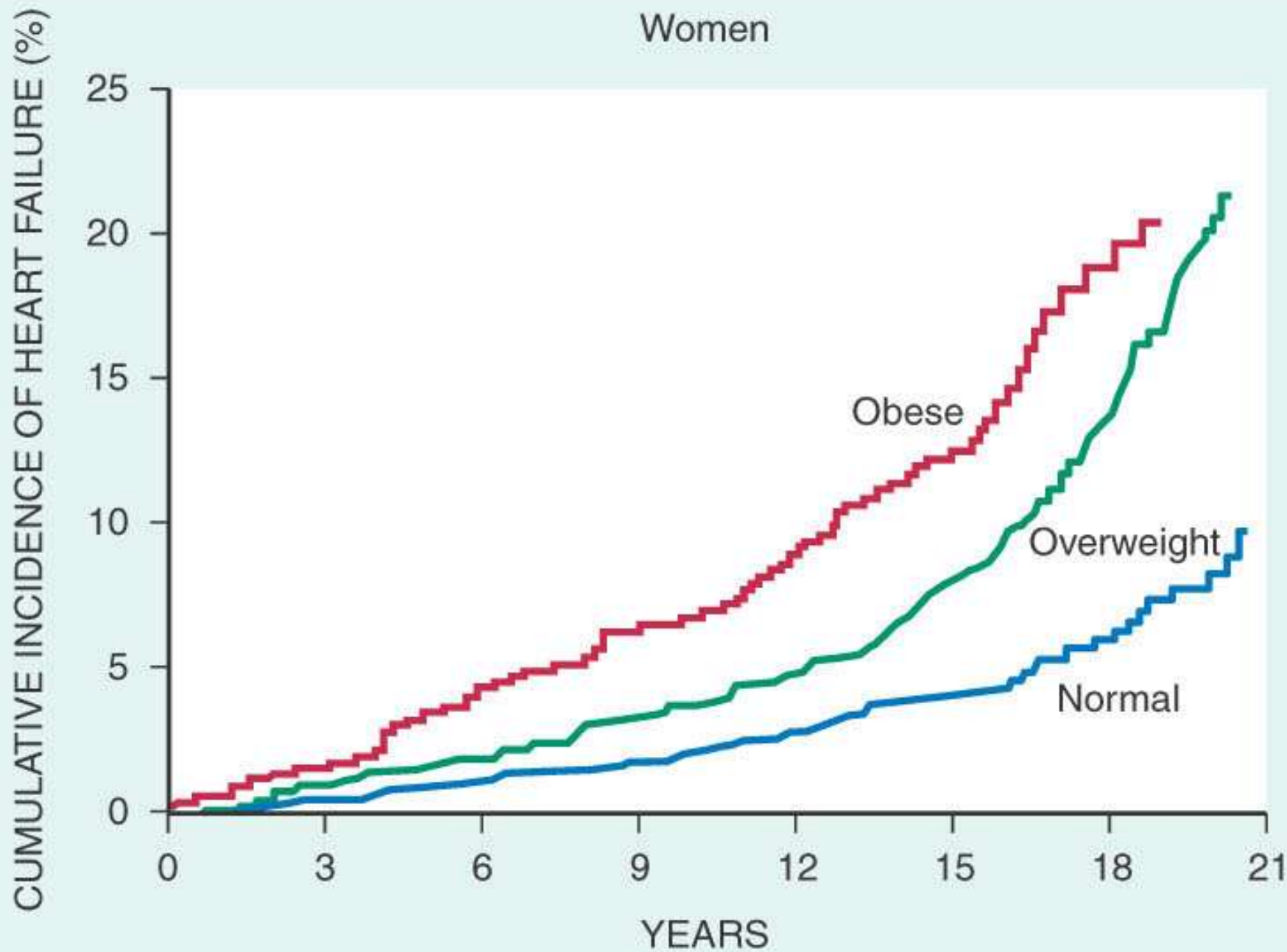
PERCENT OF POPULATION



(Data from American Heart Association: Heart Disease and Stroke Statistics—2003 Update. Dallas, American Heart Association, 2002.)

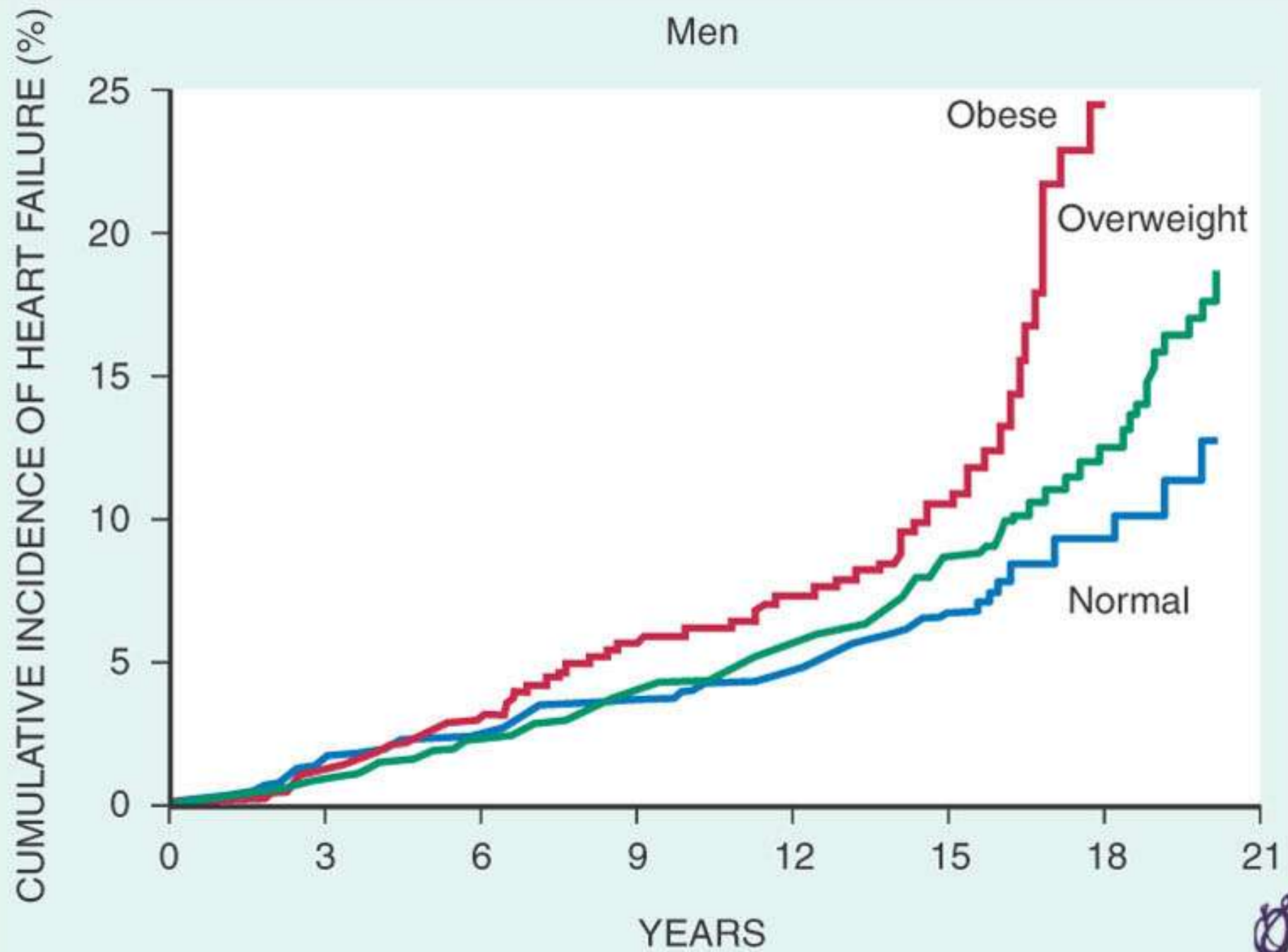


A

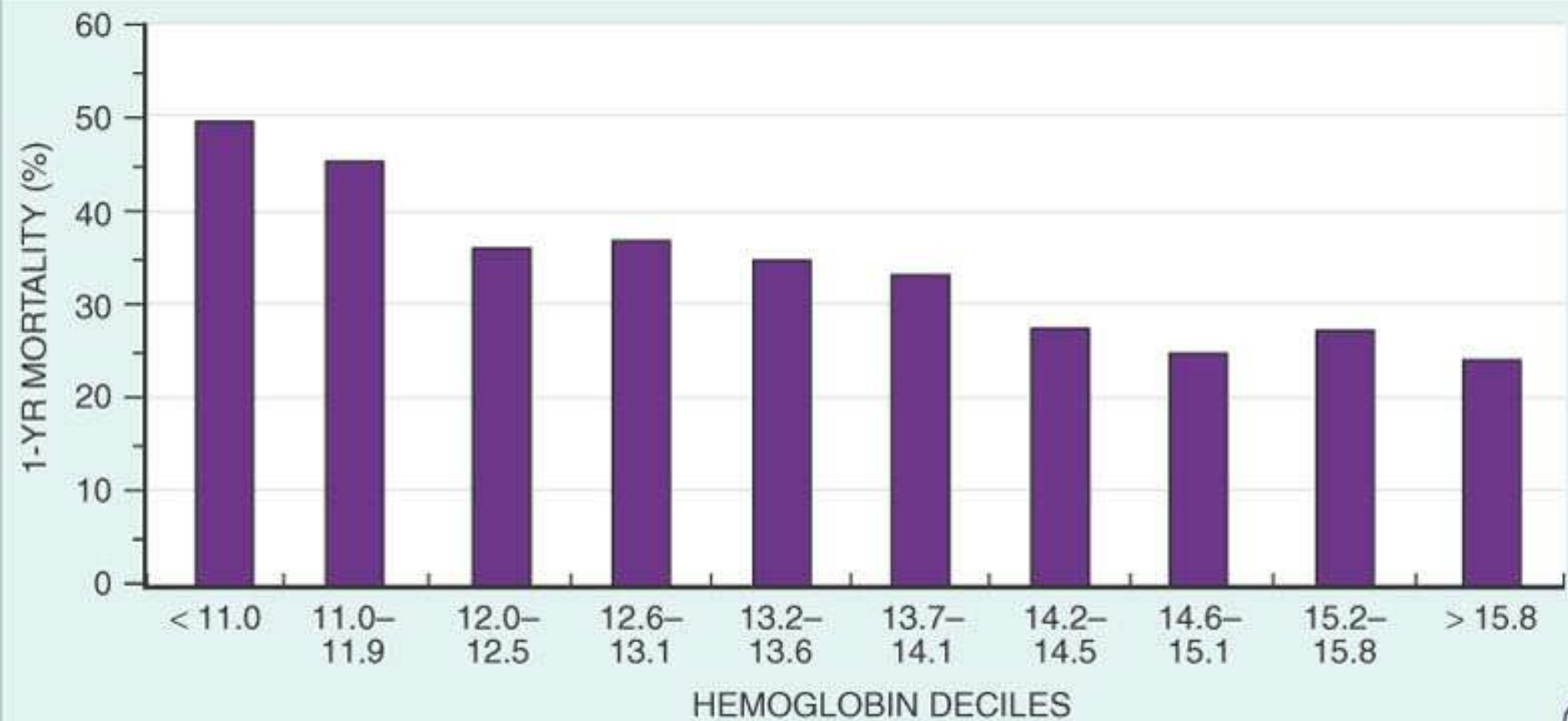


(Modified from Kenchaiah S, Evans JC, Levy D, et al: Obesity and the risk of heart failure. *N Engl J Med* 347:305, 2002.)

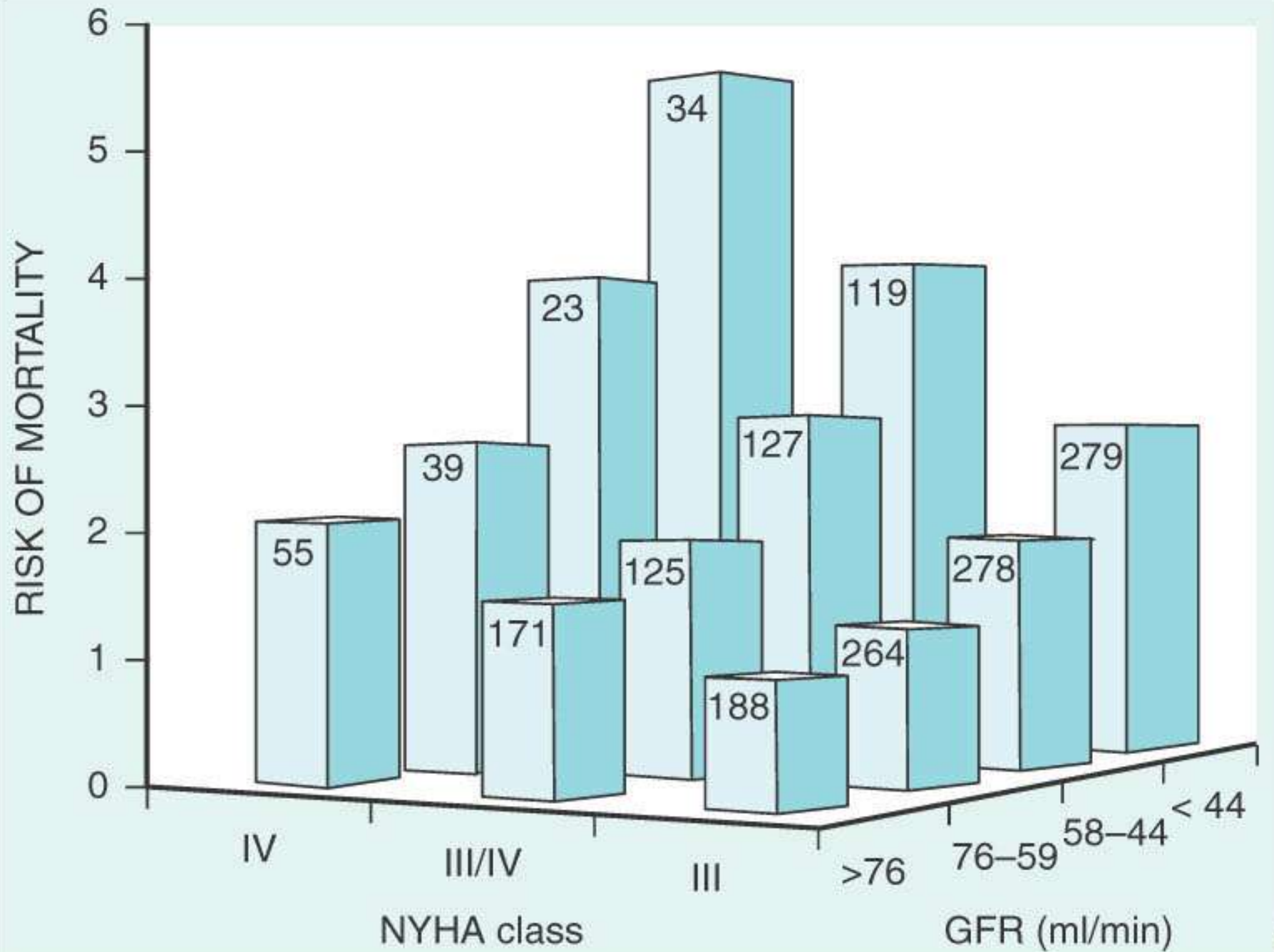
B

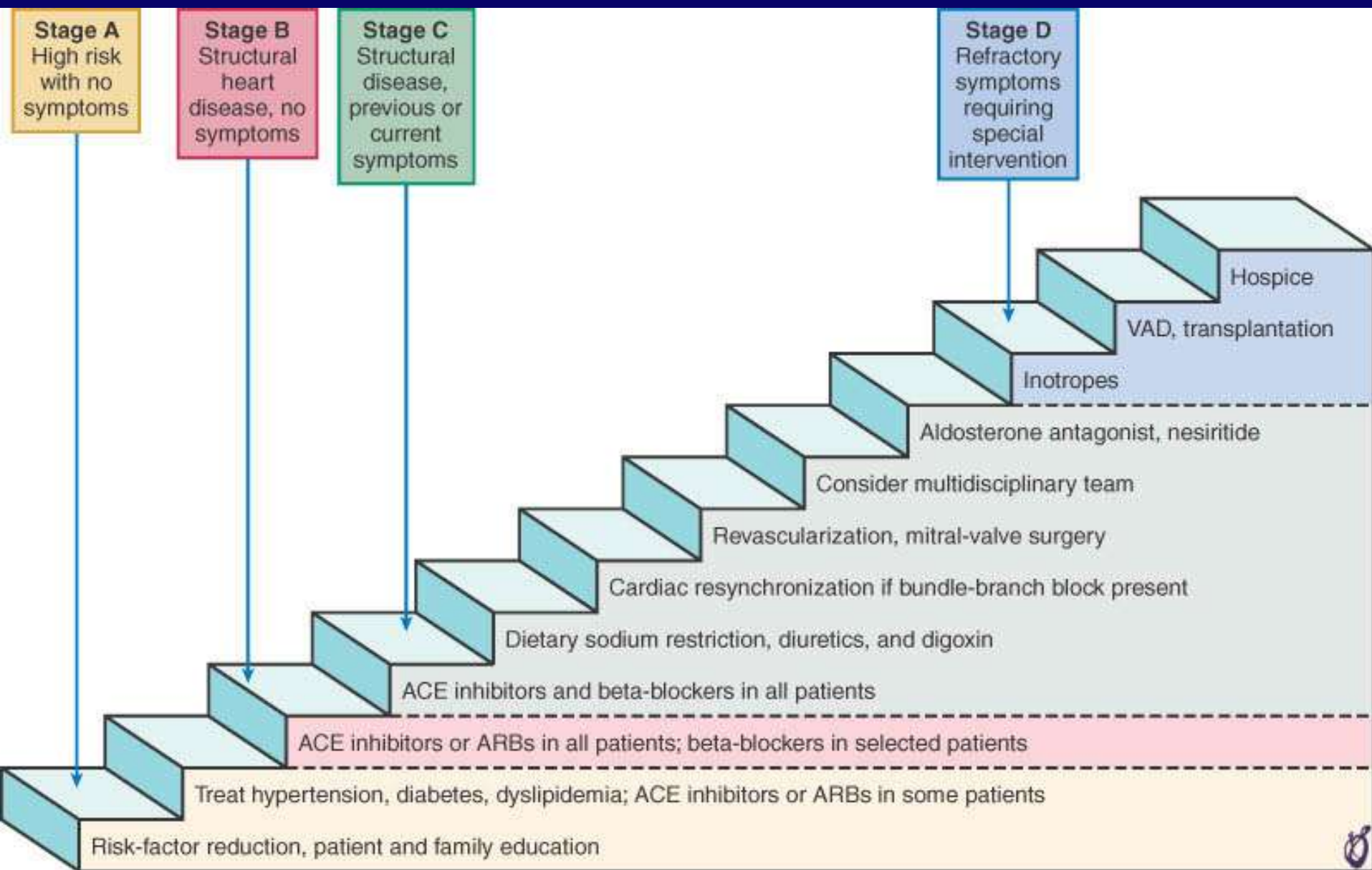


(Modified from Kenchaiah S, Evans JC, Levy D, et al: Obesity and the risk of heart failure. *N Engl J Med* 347:305, 2002.)

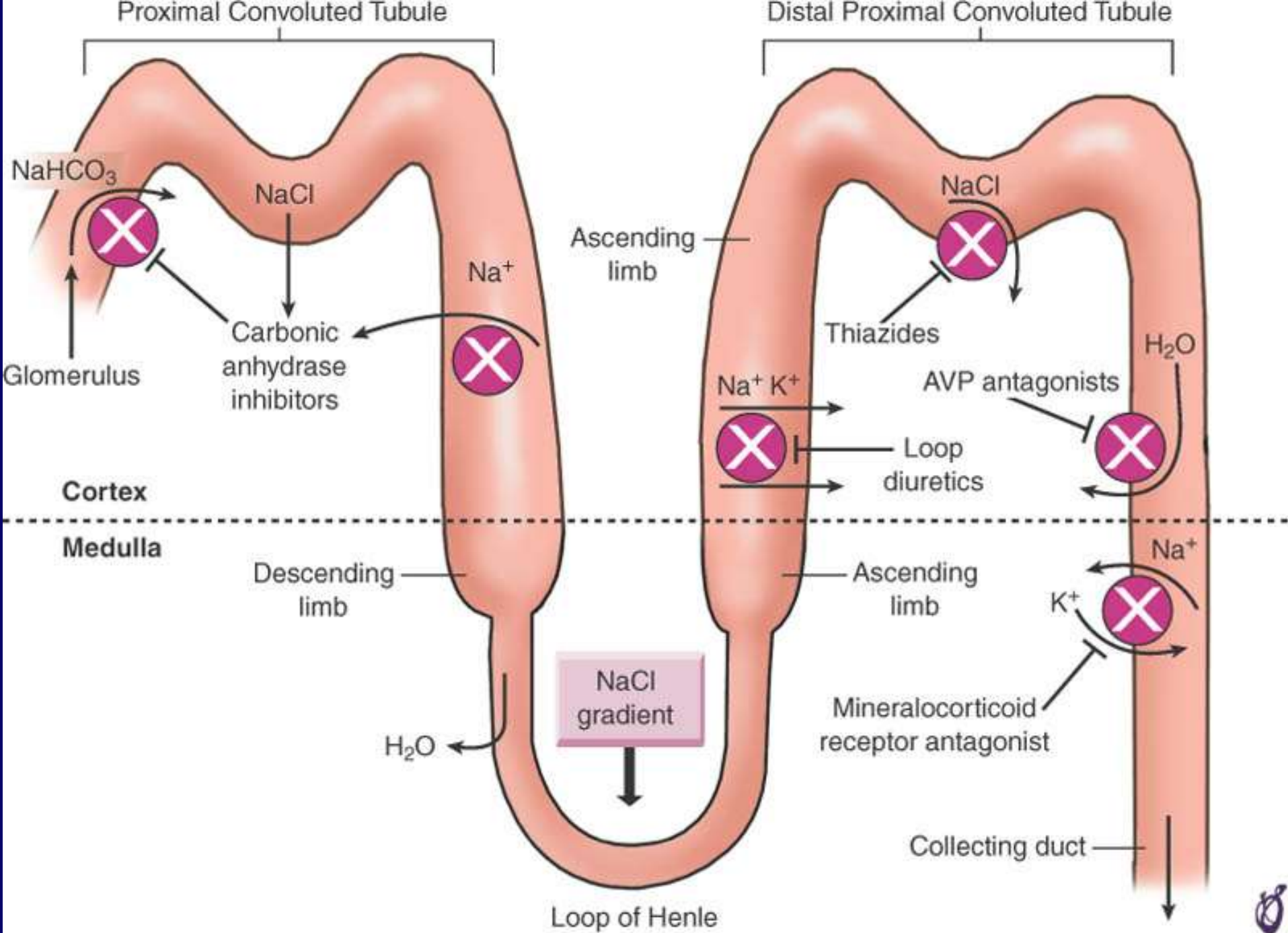


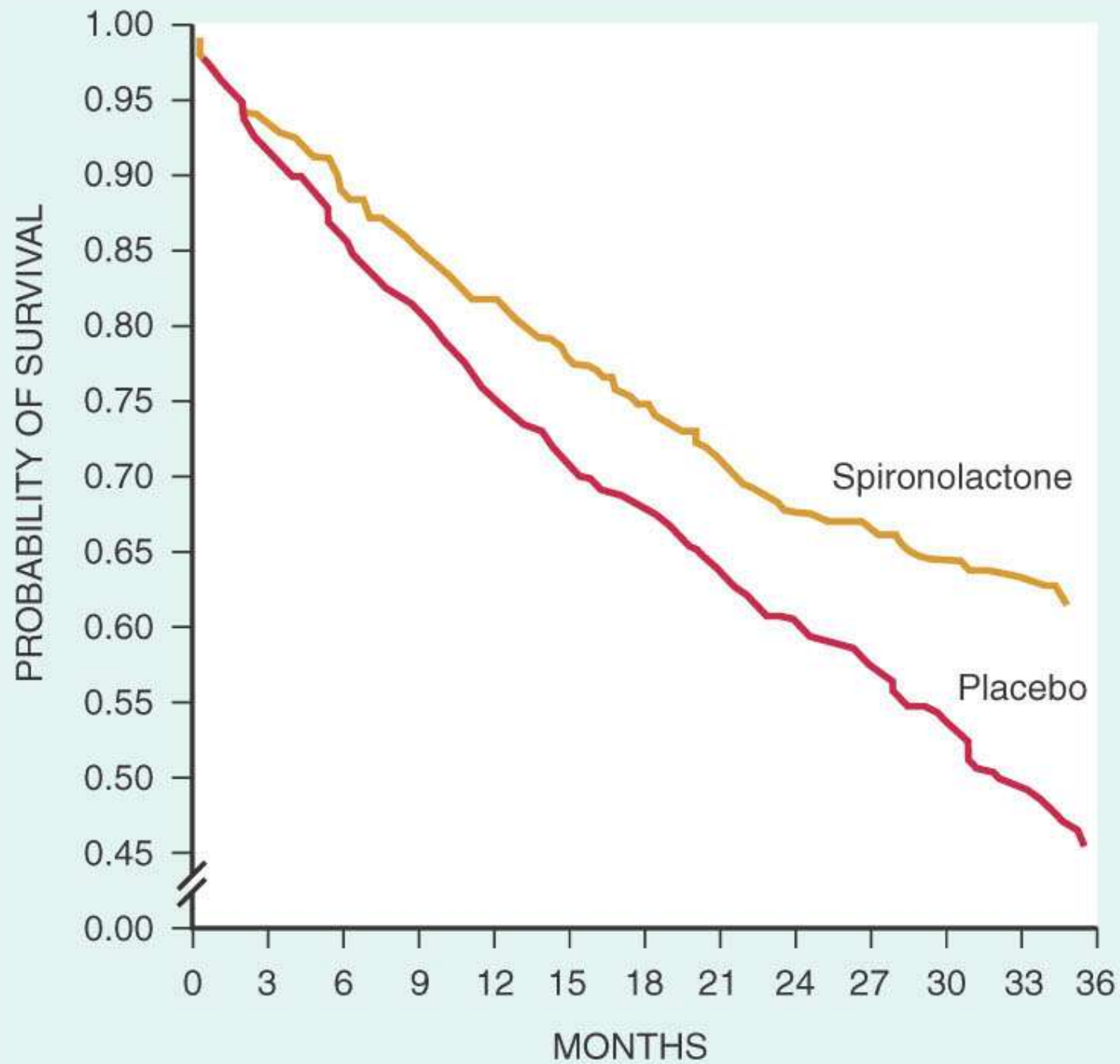
(From Horwich TB, Fonarow GC, Hamilton MA, et al: Anemia is associated with worse symptoms, greater impairment in functional capacity and a significant increase in mortality in patients with advanced heart failure. *J Am Coll Cardiol* 39:1780, 2002.)





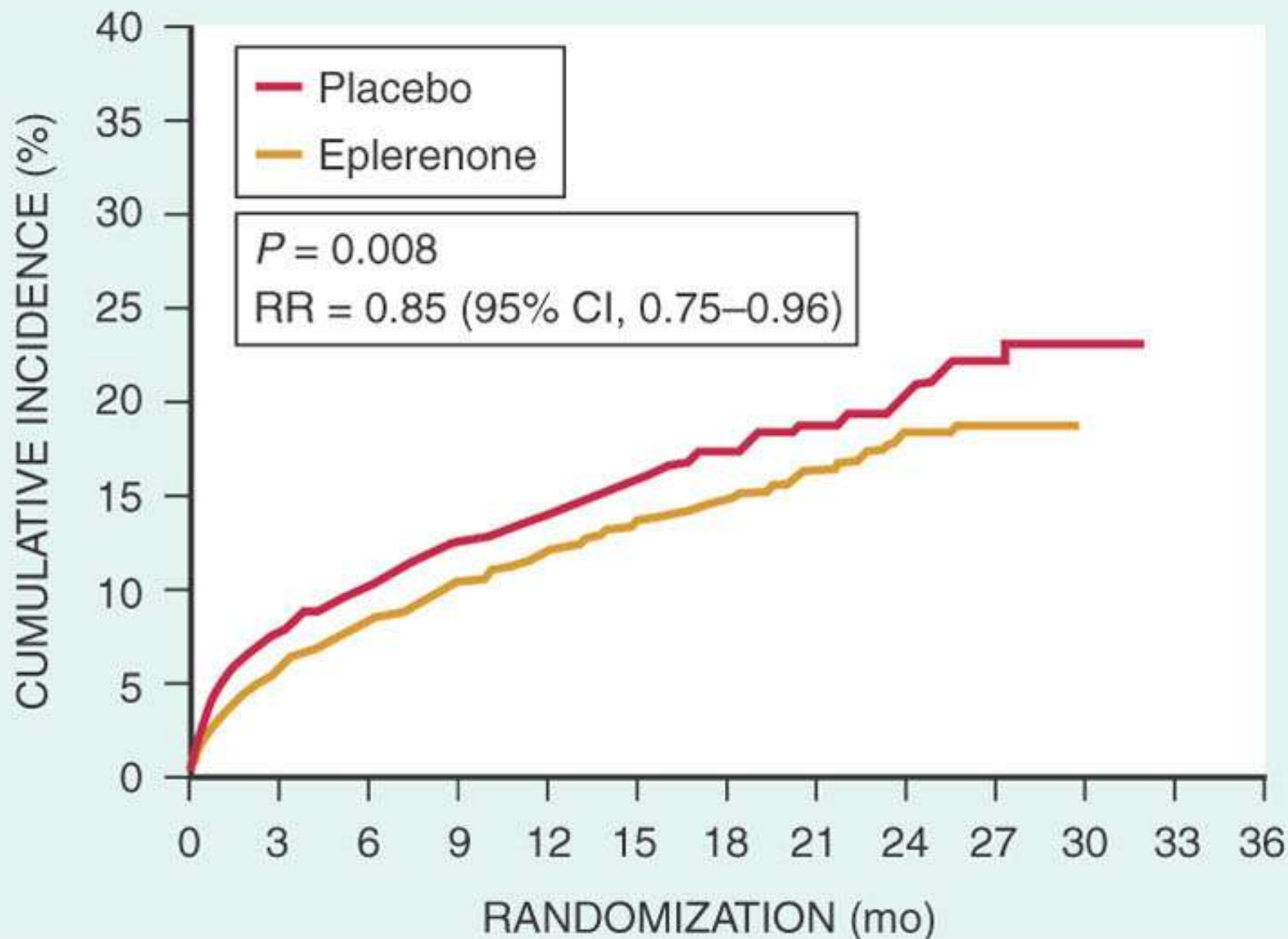
(Reprinted from Jessup M, Brozena S: Heart failure. *N Eng J Med* 348:2007-2018, 2003.)





A

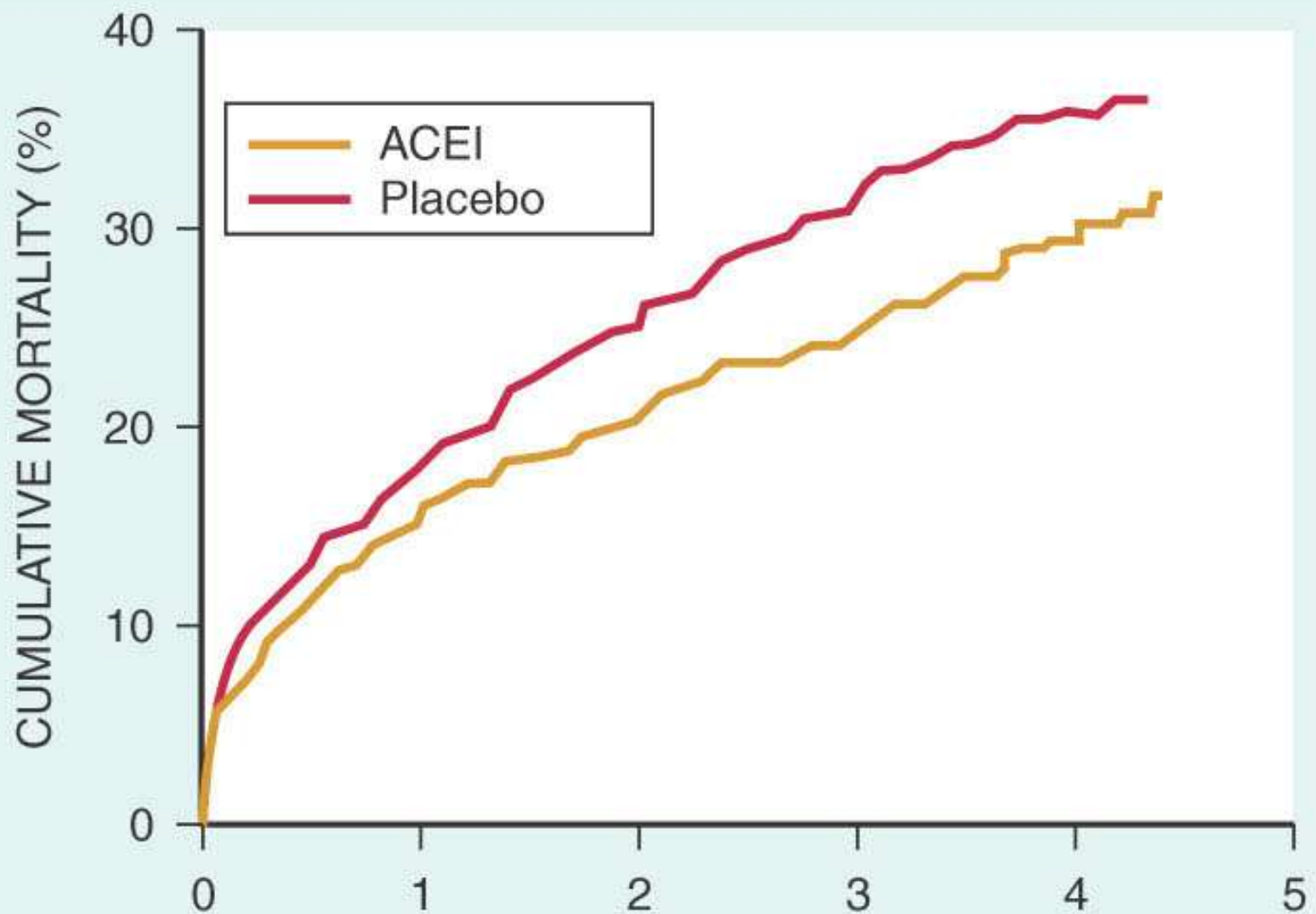
(Modified from Pitt B, Zannad F, Remme WJ, et al: The effect of spironolactone on morbidity and mortality in patients with severe heart failure. Randomized Aldactone Evaluation Study Investigators. *N Engl J Med* 341:709, 1999; and Pitt B, Remme W, Zannad F, et al: Eplerenone Post-Acute Myocardial Infarction Heart Failure Efficacy and Survival Study Investigators: Eplerenone, a selective aldosterone blocker, in patients with left ventricular dysfunction after myocardial infarction. *N Engl J Med* 348:1309, 2003.)



B



(Modified from Pitt B, Zannad F, Remme WJ, et al: The effect of spironolactone on morbidity and mortality in patients with severe heart failure. Randomized Aldactone Evaluation Study Investigators. *N Engl J Med* 341:709, 1999; and Pitt B, Remme W, Zannad F, et al: Eplerenone Post-Acute Myocardial Infarction Heart Failure Efficacy and Survival Study Investigators: Eplerenone, a selective aldosterone blocker, in patients with left ventricular dysfunction after myocardial infarction. *N Engl J Med* 348:1309, 2003.)



Number at risk

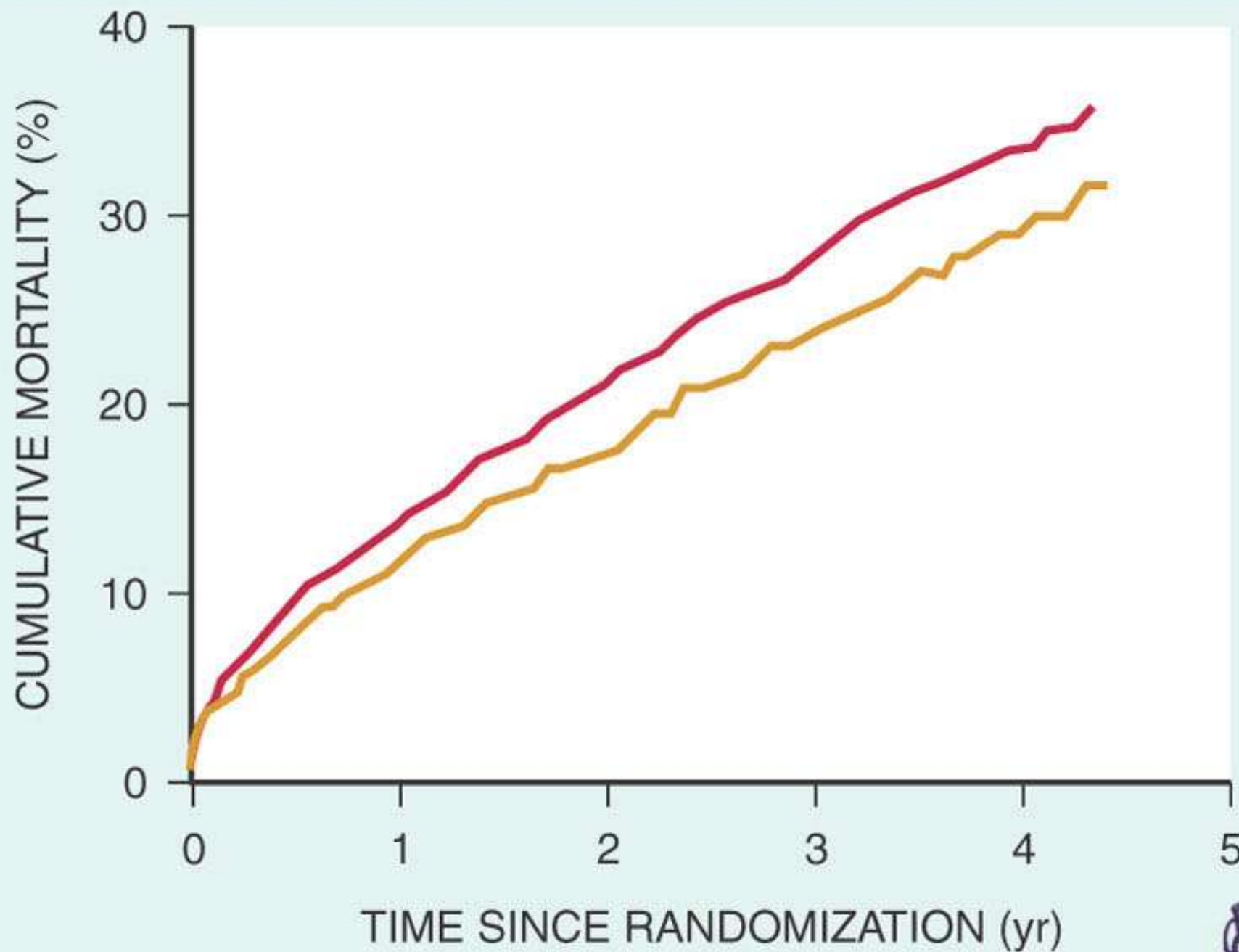
ACEI	2995	2250	1617	892	223
Placebo	2971	2184	1521	853	138

A



(Modified from Flather MD, Yusuf S, Kober L, et al: Long-term ACE-inhibitor therapy in patients with heart failure or left-ventricular dysfunction: A systematic overview of data from individual patients. ACE-Inhibitor Myocardial Infarction Collaborative Group. *Lancet* 355:1575, 2000.)

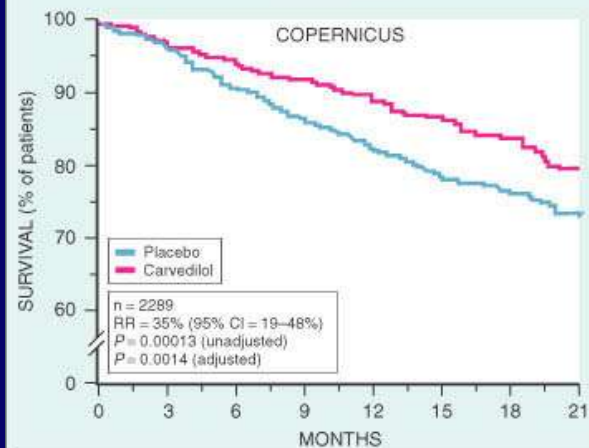
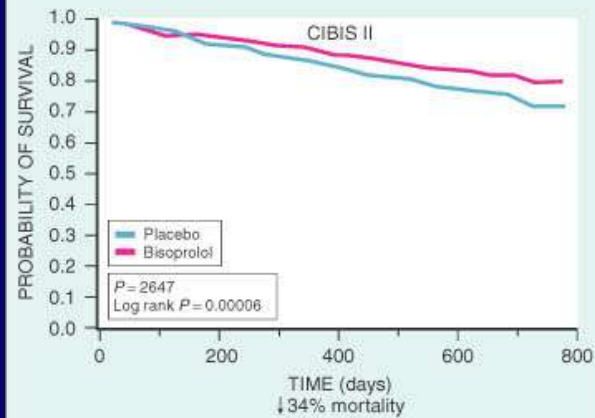
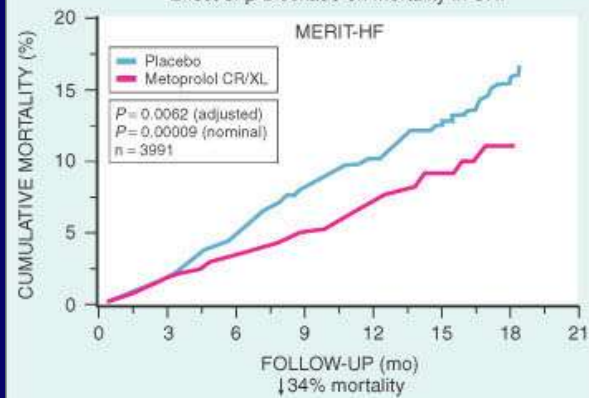
B



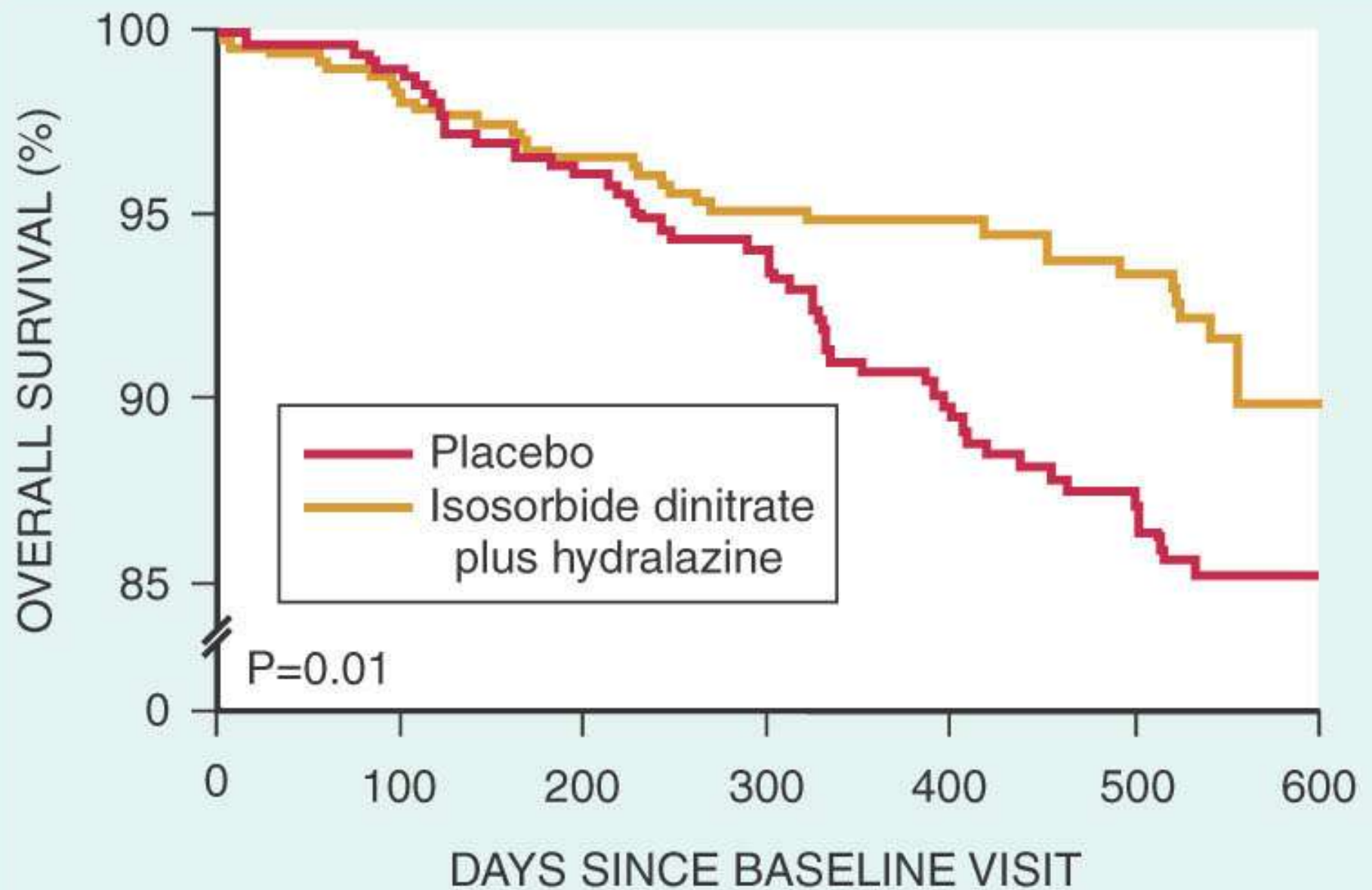
(Modified from Flather MD, Yusuf S, Kober L, et al: Long-term ACE-inhibitor therapy in patients with heart failure or left-ventricular dysfunction: A systematic overview of data from individual patients. ACE-Inhibitor Myocardial Infarction Collaborative Group. *Lancet* 355: 1575, 2000.)



Effect of β -Blockade on Mortality in CHF



(Data from The Cardiac Insufficiency Bisoprolol Study II [CIBIS II]: A randomised trial. *Lancet* 353:9, 1999; Effect of metoprolol in chronic heart failure: Metoprolol CR/XL Randomised Intervention Trial in Congestive Heart Failure [MERIT-HF]. *Lancet* 353:2001, 1999; and Packer M, Coats AJ, Fowler MB, et al: Carvedilol Prospective Randomized Cumulative Survival Study [COPERNICUS] Group: Effect of carvedilol on survival in severe chronic heart failure. *N Engl J Med* 344:1651, 2001.)



(Modified from Taylor AL, Ziesche S, Yancy C, et al: Combination of isosorbide dinitrate and hydralazine in blacks with heart failure. *N Engl J Med* 351:2049, 2004.)

TABLE 25-1

Risk Factors for Cardiac Failure: Framingham Offspring and Cohort Study*

Risk Factor	Age- and Risk Factor-Adjusted Hazard Ratio		Prevalence (%)		Population- Attributable Risk (%)	
	<i>Men</i>	<i>Women</i>	<i>Men</i>	<i>Women</i>	<i>Men</i>	<i>Women</i>
High blood pressure ($\geq 140/90$ mm Hg)	2.1	3.4	60	62	39	59
Myocardial infarction	6.3	6.0	10	3	34	13
Angina	1.4	1.7	11	9	5	5
Diabetes	1.8	3.7	8	5	6	12
Left ventricular hypertrophy	2.2	2.9	4	3	4	5
Valvular heart disease	2.5	2.1	5	8	7	8

*Subjects aged 40-89 yr; 18-yr follow-up.

From Levy D, Larson MG, Vasan RS, et al: The progression from hypertension to congestive heart failure. JAMA 275:1557, 1996.

(From Levy D, Larson MG, Vasan RS, et al: The progression from hypertension to congestive heart failure. JAMA 275:1557, 1996.)

