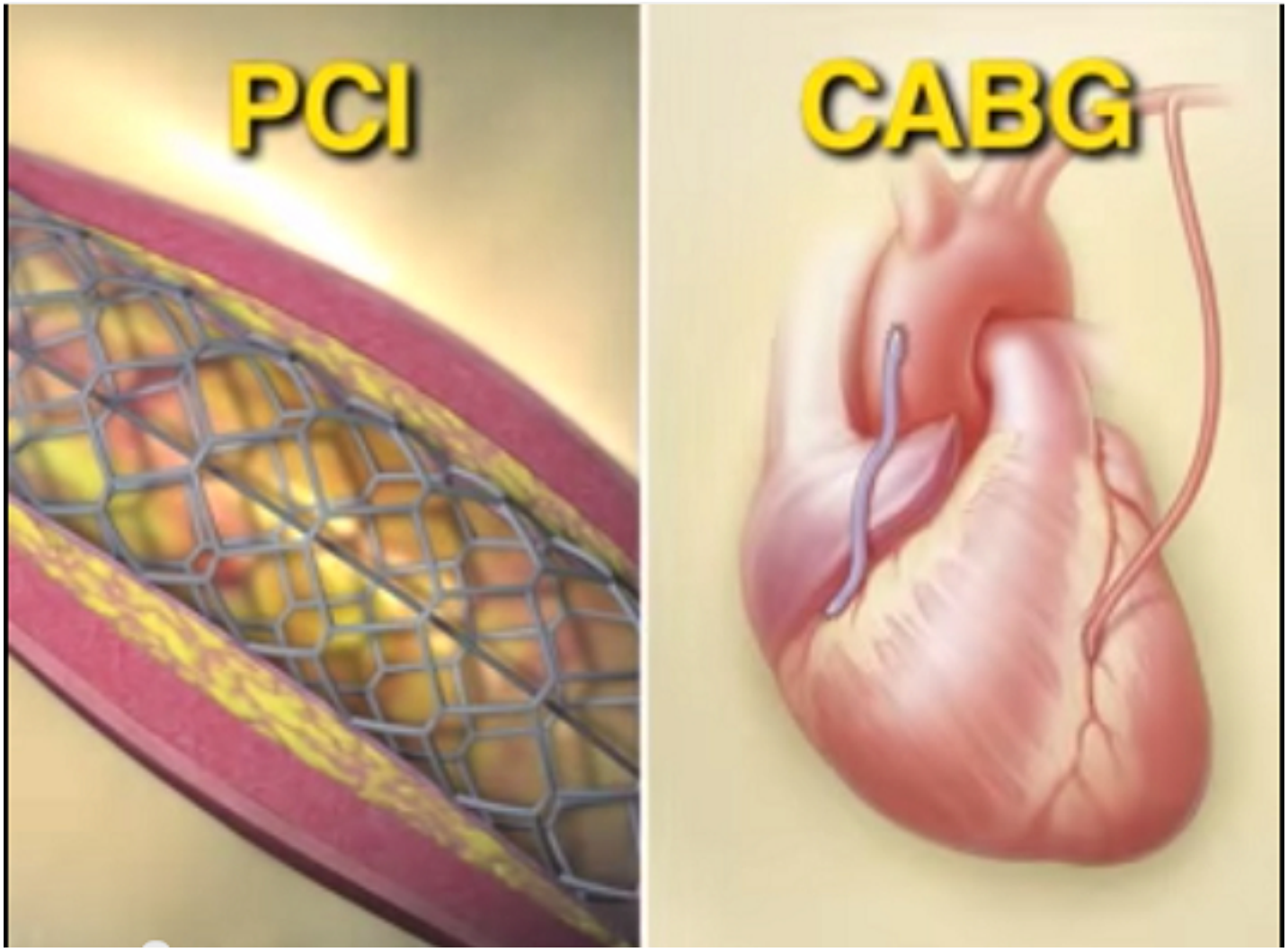
Ts Phan Đ□ng B□o Linh - Khoa N□i TM

GI□□I THIÊ□U

K□t qu□ c□a các th□ nghi□m và nghiên c□u đăng ký đã cho th□y t□ l□ t□ vong dài h□n th□p h□n sau mô□ băt câu nối ĐMV (CABG) so v□i can thi□p m□ch vành qua da (PCI) trong s□ các b□nh nhân b□ b□nh đa thân ĐMV (multivessel disease). Nh□ng nh□ng phân tích tr□□c đây ch□a đánh giá PCI v□i stent phu□ thu□c th□ h□ th□ hai vì cân pha□i có nh□ng nghiên c□u m□i đê□ tra□ l□i câu ho□i nay.



PH□□NG PHA□P

Trong m□t nghiên c□u đăng ký quan sát, tiến hành so sánh các k□t qu□ □ nhóm b□nh nhân bê□nh đa thân ĐMV tr□i qua ph□u băt câu (CABG) so v□i k□t qu□ t□□ng t□□ □□ nh□ng bê□nh nhân nhóm PCI s□ d□ng stent phu□ thuốc everolimus (thế hê□ 2). K□t c□c chính là t□ l□ t□ vong do mo□i nguyên nhân. K□t c□c th□ phát là t□ l□ nh□i máu c□ tim, đ□t qu□ và l□p l□i tái thông m□ch máu. Viê□c đối ch□ng các că□p điê□m phù h□□p đã đ□□c s□ d□ng đ□ ta□o ra m□t nhóm b□nh nhân có các đ□c đi□m c□ b□n t□□ng t□ nhau.

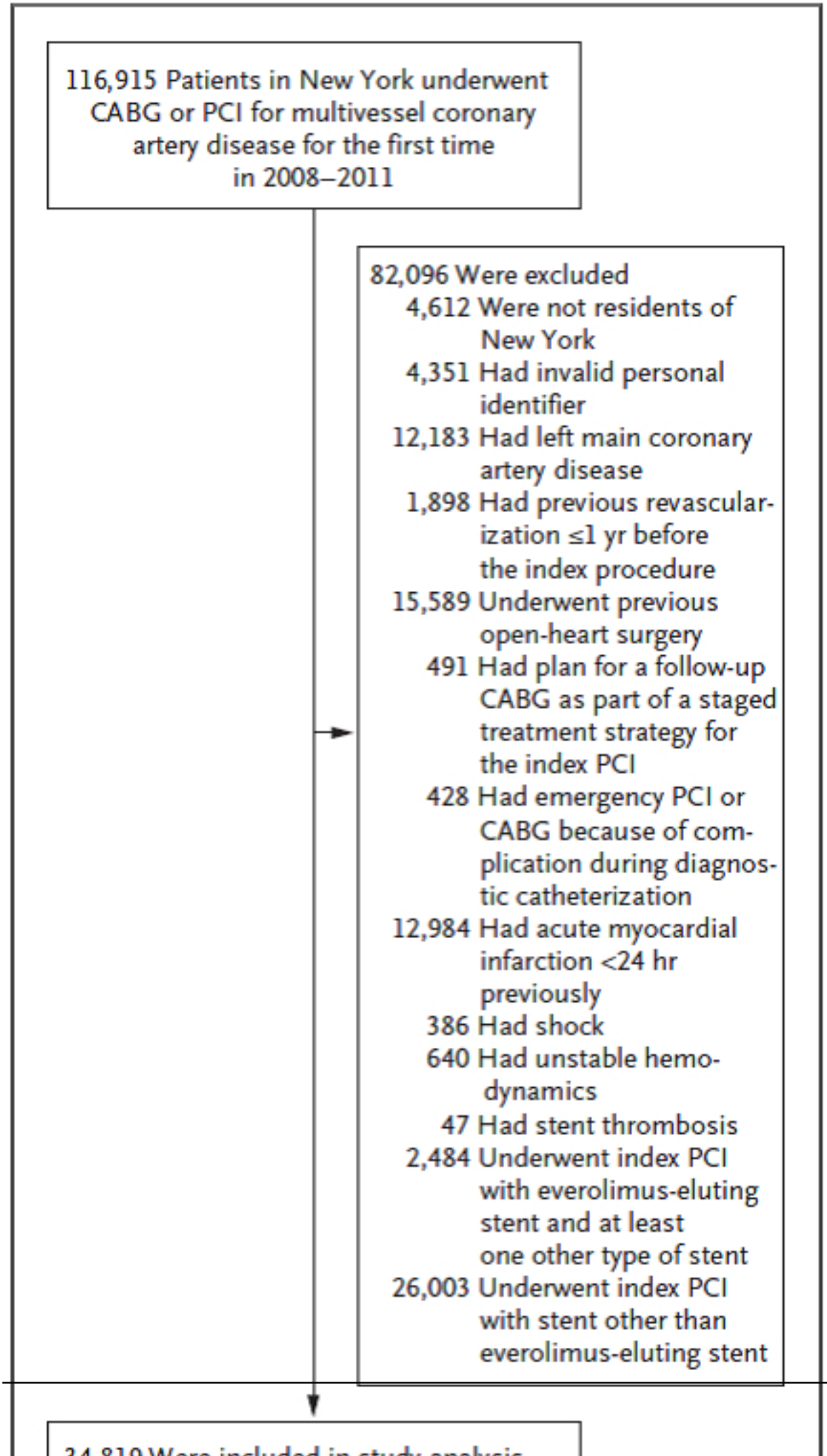

116,915 Patients in New York underwent CABG or PCI for multivessel coronary artery disease for the first time in 2008–2011
82,096 Were excluded
4,612 Were not residents of New York
4,351 Had invalid personal identifier
12,183 Had left main coronary artery disease
1,898 Had previous revascularization ≤1 yr before the index procedure
15,589 Underwent previous open-heart surgery
491 Had plan for a follow-up CABG as part of a staged treatment strategy for the index PCI
428 Had emergency PCI or CABG because of complication during diagnostic catheterization
12,984 Had acute myocardial infarction <24 hr previously
386 Had shock
640 Had unstable hemodynamics
47 Had stent thrombosis
2,484 Underwent index PCI with everolimus-eluting stent and at least one other type of stent
26,003 Underwent index PCI with stent other than everolimus-eluting stent

Table 1. Baseline Characteristics before and after Propensity-Score Matching.*

Characteristic	Before Matching			After Matching		
	PCI (N=16,876)	CABG (N=17,943)	Standardized Difference	PCI (N=9223)	CABG (N=9223)	Standardized Difference
			%			%
Age						
Mean (yr)	65.0±11.2	65.3±10.6	2.4	65.1±11.1	65.1±10.8	0.5
Distribution (%)						
<59 yr	32.2	29.4	6.0	31.2	30.7	0.9
60–69 yr	31.8	33.9	4.4	32.8	33.1	0.6
70–79 yr	25.6	27.5	4.5	26.4	26.0	0.8
≥80 yr	10.4	9.1	4.4	9.6	10.1	1.6
Sex (%)						
Male	70.8	74.2	7.7	72.6	72.9	0.7
Female	29.2	25.8	7.7	27.4	27.1	0.7
Body-surface area (m^2)	2.03±0.27	2.04±0.27	<0.1	2.04±0.27	2.04±0.27	0.2
Hispanic ethnic group (%)†	12.4	8.9	11.4	11.0	11.0	0.0
Race (%)†						
White	76.7	85.1	21.6	81.0	81.5	1.2
Black	11.2	7.7	12.1	9.3	9.1	0.7
Other	12.1	7.2	16.8	9.7	9.4	0.9
Diabetes (%)	39.0	40.6	3.1	39.0	39.5	1.2
Ejection fraction (%)						
<20%	0.6	1.5	9.7	0.8	0.8	0.5
20–29%	2.9	6.5	16.8	4.1	4.4	1.4
30–39%	5.0	11.4	23.8	7.2	7.4	0.6
40–49%	12.2	19.0	18.7	15.7	15.4	1.0
≥50%	74.5	61.3	28.5	71.7	71.6	0.4
Data missing	4.8	0.3	29.1	0.5	0.5	0.5
Previous myocardial infarction (%)						
1–7 Days before treatment	15.2	18.5	8.6	17.0	16.8	0.4
8–14 Days before treatment	1.2	5.2	23.0	2.0	2.0	0.5
15–20 Days before treatment	0.3	1.0	8.9	0.4	0.5	1.6
>20 Days before treatment	17.5	22.4	12.1	19.5	19.5	0.1
None	65.8	53.0	26.3	61.2	61.1	0.1
Cerebrovascular disease (%)	2.4	7.6	24.1	3.6	3.8	1.0
Peripheral arterial disease (%)	8.6	11.6	9.9	9.6	9.8	0.5
COPD (%)	5.3	12.5	25.4	7.6	7.7	0.4
Congestive heart failure (%)						
None	93.9	85.2	28.8	91.3	91.2	0.4
At current admission	3.7	11.7	30.4	5.8	6.0	0.8
Before current admission	2.4	3.1	4.4	2.8	2.7	0.5

Table 1. (Continued.)

Characteristic	Before Matching			After Matching		
	PCI (N=16,876)	CABG (N=17,943)	Standardized Difference	PCI (N=9223)	CABG (N=9223)	Standardized Difference
			%			%
Malignant ventricular arrhythmia (%)	0.4	0.8	6.3	0.5	0.6	0.9
Renal failure (%)						
Requiring dialysis	2.5	2.8	2.3	2.4	2.7	1.5
Creatinine level in patients not requiring dialysis‡						
<1.3 mg/dl	78.2	73.6	10.9	77.1	76.4	1.8
1.3–1.5 mg/dl	12.2	13.4	3.8	12.6	13.0	1.1
1.6–2.0 mg/dl	5.0	6.7	6.9	5.4	5.5	0.3
>2.0 mg/dl	2.1	3.5	8.4	2.4	2.5	0.5
No. of diseased vessels (%)						
2						
With proximal LAD artery	18.8	17.8	2.7	26.3	25.9	0.8
Without proximal LAD artery	55.1	15.7	90.5	29.5	29.2	0.5
3						
With proximal LAD artery	8.6	35.5	68.7	15.3	15.2	0.4
Without proximal LAD artery	17.5	31.0	32.0	28.9	29.6	1.6
Prior PCI (%)	31.7	18.0	32.0	24.5	24.1	1.0

* Plus–minus values are means ±SD. The standardized differences are reported as percentages; a difference of less than 10.0% indicates a relatively small imbalance. CABG denotes coronary-artery bypass grafting, COPD chronic obstructive pulmonary disease, LAD left anterior descending, and PCI percutaneous coronary intervention.
† Race and ethnic group were self-reported.
‡ To convert the values for creatinine to micromoles per liter, multiply by 88.4.

Table 2. Risk of Primary and Secondary Outcomes in the Propensity-Score–Matched Cohort.*

Outcome	No. of Patients with Event	Event Rate %/yr	Hazard Ratio (95% CI)	P Value
Death				
PCI	768	3.10	1.04 (0.93–1.17)	0.50
CABG	815	2.86	Reference	
Myocardial infarction				
PCI	462	1.87	1.51 (1.29–1.77)	<0.001
CABG	322	1.13	Reference	
Stroke				
PCI	178	0.72	0.62 (0.50–0.76)	<0.001
CABG	277	0.97	Reference	
Revascularization				
PCI	1793	7.25	2.35 (2.14–2.58)	<0.001
CABG	883	3.10	Reference	

* The propensity-score–matched cohort included 9223 patients in the PCI group and 9223 patients in the CABG group.

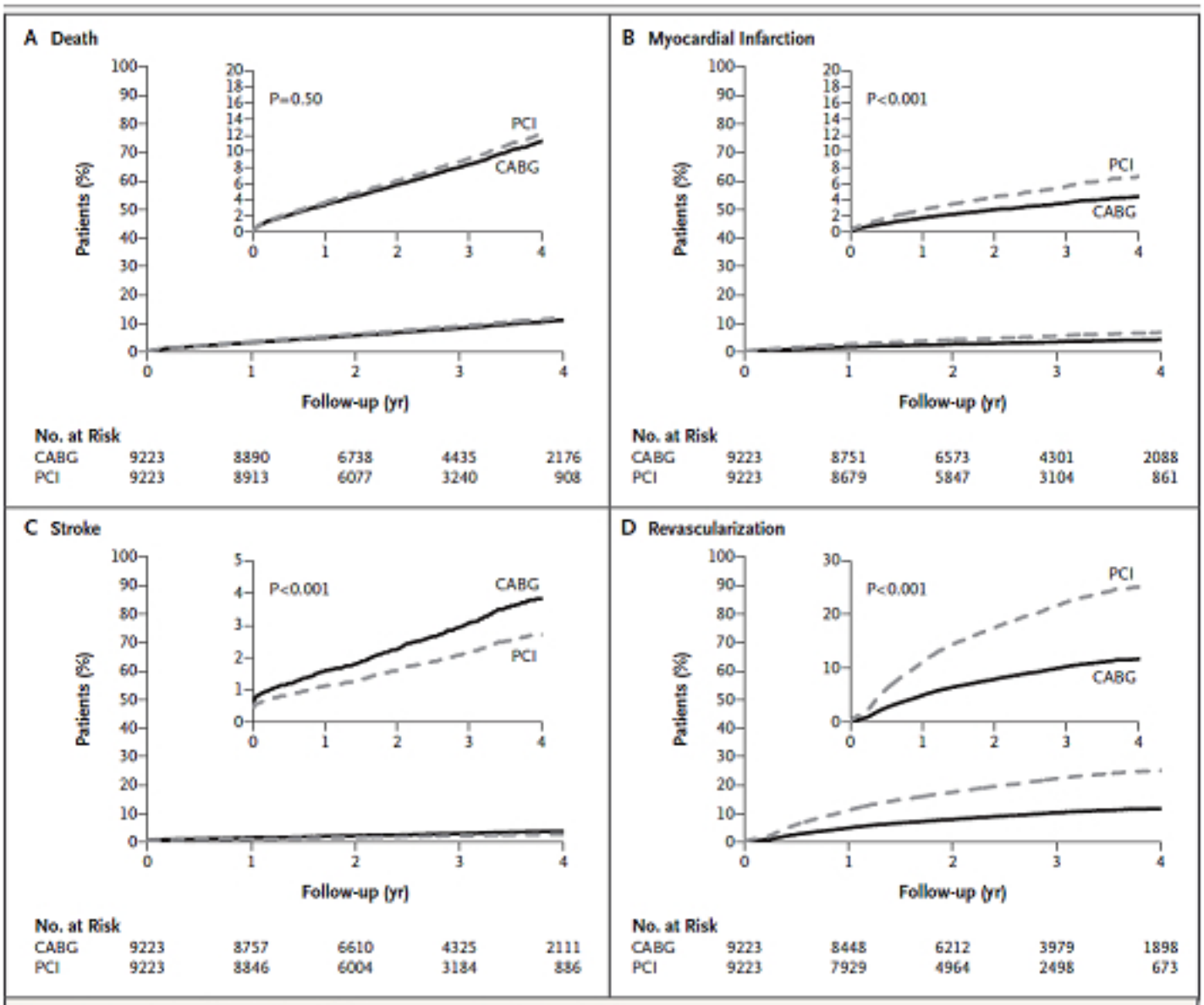


Figure 2. Cumulative Risks of the Study Outcomes in the Matched Cohort.
In each panel, the inset shows the same data on an enlarged y axis.

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