

5-year outcome in patients with TIA and minor stroke: final results of the TIAregistry.org

Pierre Amarenco, M.D., Philippa C Lavallée, M.D., Lindsay Monteiro Tavares, B.S.T., Julien Labreuche, B.S.T., Gregory W Albers, M.D., Halim Abboud, M.D., Sabrina Anticoli, M.D., Heinrich Audebert, M.D., Natan M Bornstein, M.D., Louis R Caplan, M.D., Manuel Correia, M.D., Geoffrey A Donnan, M.D., José M Ferro, M.D., Fernando Gongora-Rivera, M.D., Wolfgang Heide, M.D., Michael G Hennerici, M.D., Peter J Kelly, M.D., Michal Král, M.D., Hsiu-Fen Lin, M.D., Carlos Molina, M.D., Jong Moo Park, M.D., Francisco Purroy, M.D., Peter M Rothwell, M.D., Tomas Segura, M.D., David Školoudík, M.D., Ph.D., Philippe Gabriel Steg, M.D., Pierre-Jean Touboul, M.D., Shinichiro Uchiyama, M.D., Éric Vicaut, M.D., Yongjun Wang, M.D., Lawrence KS Wong, M.D. on behalf of the TIAregistry.org Investigators

Disclosure

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TIAregistry.org: Objectives

- The TIAregistry.org was designed to evaluate short and long-term (5-year) outcomes in patients with TIA or minor ischemic stroke
- and to refine risk assessment in the context of urgent stroke prevention and new diagnostic tools
- We report the 5-year final results

TIAregistry.org

- International, TIA-clinic based, web based registry with long-term follow-up
- Patients with acute cerebro-vascular syndrome with Rankin score 0 or 1 (TIA or minor ischemic stroke)
- Evaluated within 7 days of stroke onset, stratified by
 - <24 hours
 - >24 hours and <7 days

End points

- I: stroke, MI, vascular death
- II: stroke fatal or non fatal; stroke or TIA; any cardiac event; any revascularization procedure following ischemic event; any revascularization procedure

Study Numbers

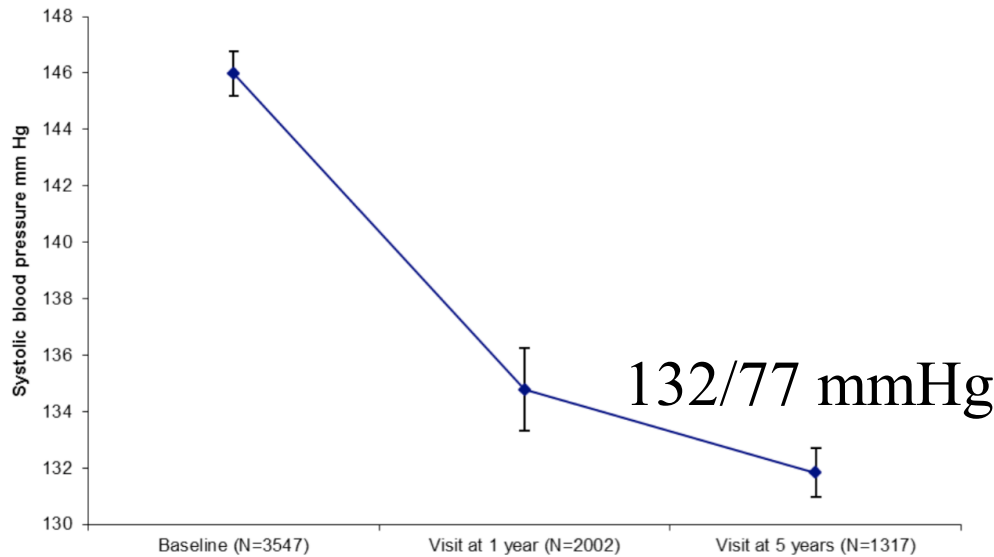
- Accrual time: July 09 to Dec 2011
- 4789 patients enrolled (1134 in Asia, 345 in Japan) in 61 centers (Europe 34, Asia 20, North America 2, South America 4, Middle East 1)
- Follow-up lasts 5 years for 3847 pts : 42 centers with the median percentage of 5-year follow-up per center was 92.3% [IQR 83.4-97.8%]
- 10 centers with no 5-yr F/U, 4 with <10% 5-yr F/U, 3 with 16%, 32% and 44% 5-yr F/U

Table 2. Medication Use, Atrial Fibrillation, and Surgery at Baseline, Discharge, 1 Year, and 5 Years.

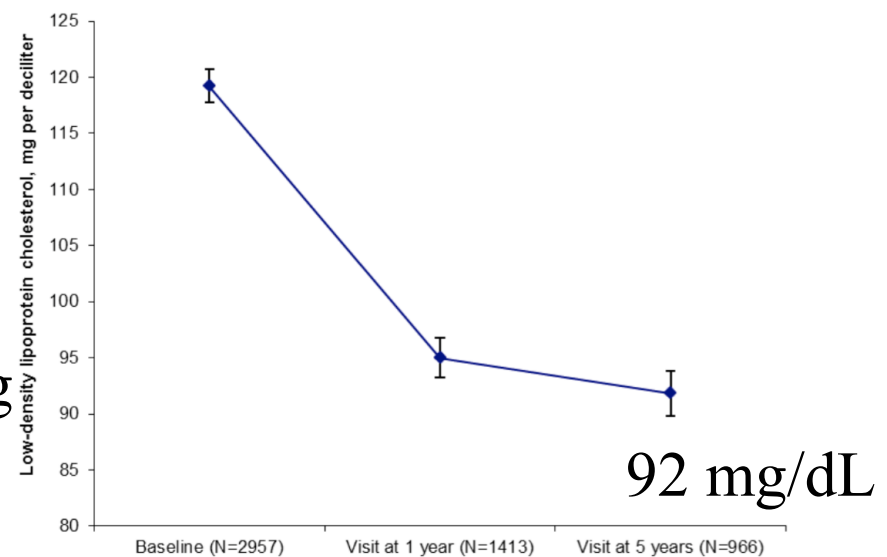
Variable	Before Admission (N=3847)	At Discharge (N=3847)	At 1 Year (N=3565)	At 5 Years (N=2948)
	<i>number/total number (percent)</i>			
≥1 Antiplatelet agent	1063/3831 (27.7)	3410/3762 (90.6)	2742/3515 (78.0)	1923/2705 (71.1)
Aspirin	925/1063 (87.0)	2538/3410 (74.4)	1981/2742 (72.2)	1347/1923 (70.0)
Other antiplatelet agent	243/1063 (22.9)	1347/3410 (39.5)	1072/2742 (39.1)	702/1923 (36.5)
Dual antiplatelet therapy	108/1063 (10.2)	550/3410 (16.1)	316/2742 (11.5)	127/1923 (6.6)
≥1 Anticoagulant agent	191/3831 (5.0)	614/3781 (16.2)	601/3499 (17.2)	461/2704 (17.0)
≥1 Antihypertensive agent	2114/3838 (55.1)	2621/3815 (68.7)	2477/3484 (71.1)	1904/2701 (70.5)
1	879/2114 (41.6)	1155/2621 (44.1)	998/3484 (28.6)	752/1904 (39.5)
2	691/2114 (32.7)	785/2621 (30.0)	853/3484 (24.5)	686/1904 (36.0)
≥3	497/2114 (23.5)	550/2621 (21.0)	618/3484 (17.7)	461/1904 (24.2)
≥1 Lipid-lowering agent	1064/3834 (27.8)	2674/3793 (70.5)	2362/3483 (67.8)	1728/2704 (63.9)
Statin	987/1064 (92.8)	2583/2674 (96.6)	2293/2362 (97.1)	1680/1728 (97.2)
Other lipid-lowering agent	114/1064 (10.7)	110/2674 (4.1)	118/2362 (5.0)	121/1728 (7.0)
≥1 Glucose-lowering agent	637/3831 (16.6)	714/3789 (18.8)	586/3391 (17.3)	479/2700 (17.7)
Carotid endarterectomy*		96/3847 (2.5)	172/3847 (4.5)	191/3847 (5.0)
Carotid endarterectomy since discharge			76/3565 (2.1)	19/2948 (0.6)
Atrial fibrillation*		370/3847 (9.6)	442/3847 (11.5)	509/3847 (13.2)
New onset of atrial fibrillation since discharge			72/3565 (2.0)	67/2948 (2.3)
Anticoagulant agent for atrial fibrillation	130/331 (39.3)	241/367 (65.7)	52/72 (72.2)	47/67 (70.1)

Risk factor control during F/U

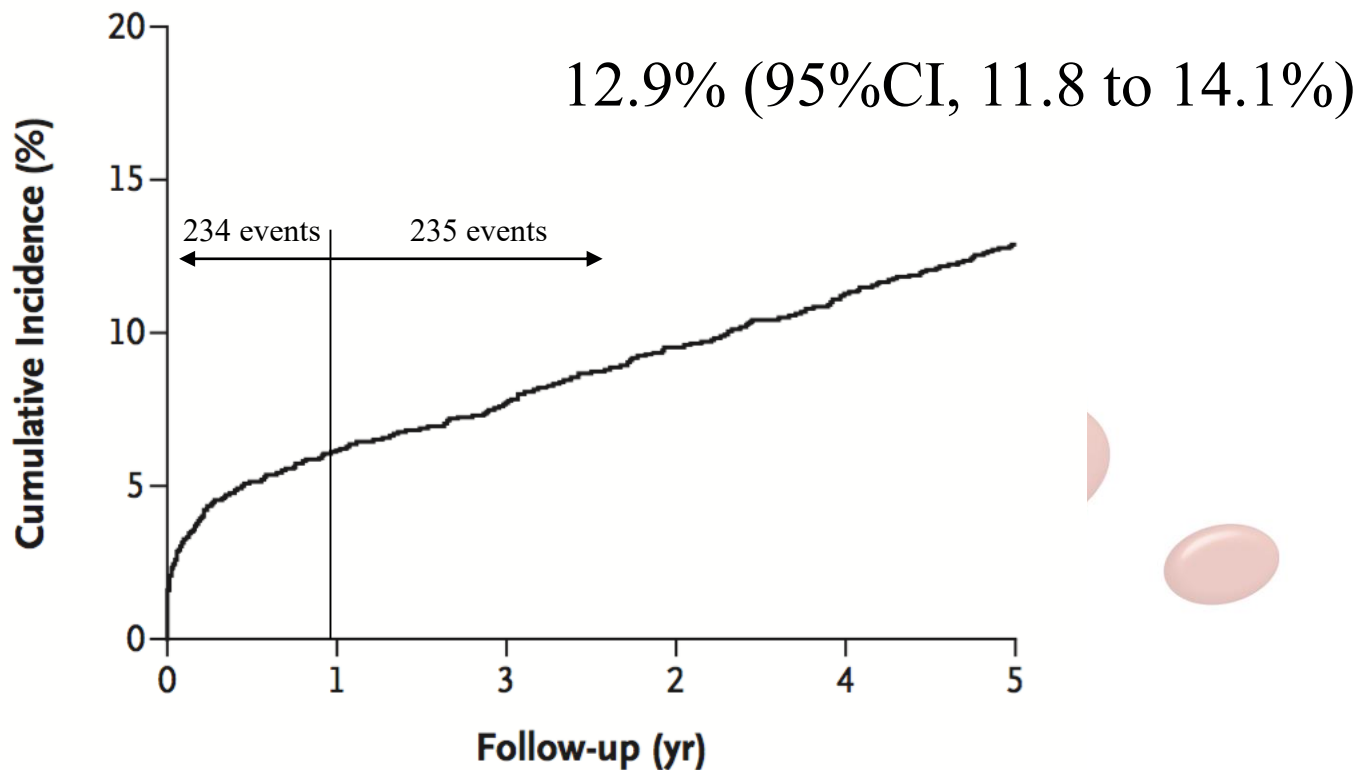
Blood pressure lowering



LDL lowering



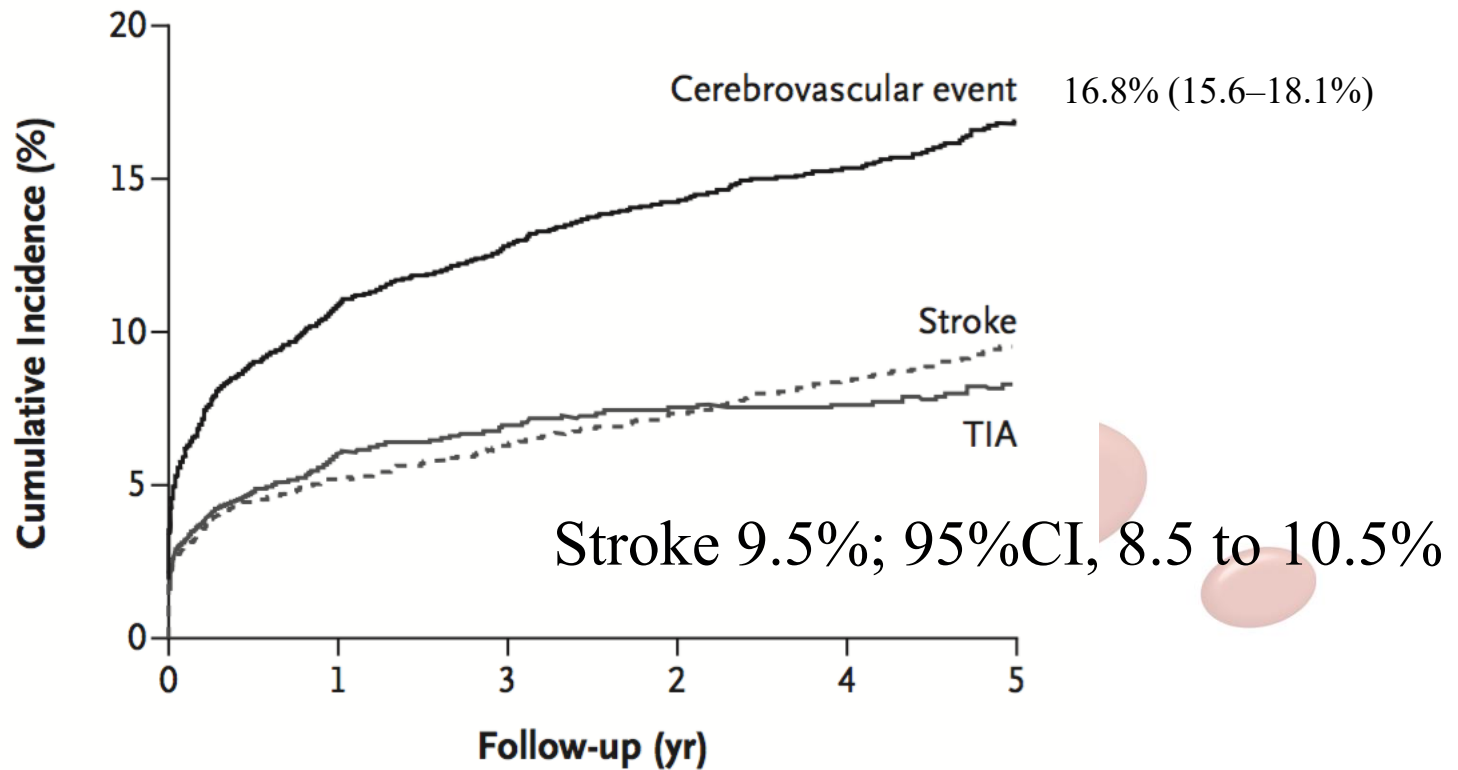
A Major Cardiovascular Events



No. of Patients

Alive and free of event	3847	3471	3216	3006	2833	2197
Event	0	235	290	358	415	469
Death from nonvascular causes	0	48	97	148	198	249

B Cerebrovascular Events, Stroke, and TIA



No. of Patients

Cerebrovascular event

Alive and free of event	3847	3291	3028	2825	2664	2066
Event	0	410	481	533	570	621
Death from nonvascular causes	0	54	105	170	231	287

5-yr Primary Outcome

Overall cohort
N = 3847

Event rates

Major Cardiovascular Events (%)

469

12.9% (11.8 to 14.1%)

Cardiovascular death

96

2.7% (2.2 to 3.3%)

Non fatal stroke

297

8.1% (7.3 to 9.0%)

Non fatal acute coronary syndrome

76

2.1% (1.7 to 2.6%)

Secondary outcomes (%)

All cause death

373

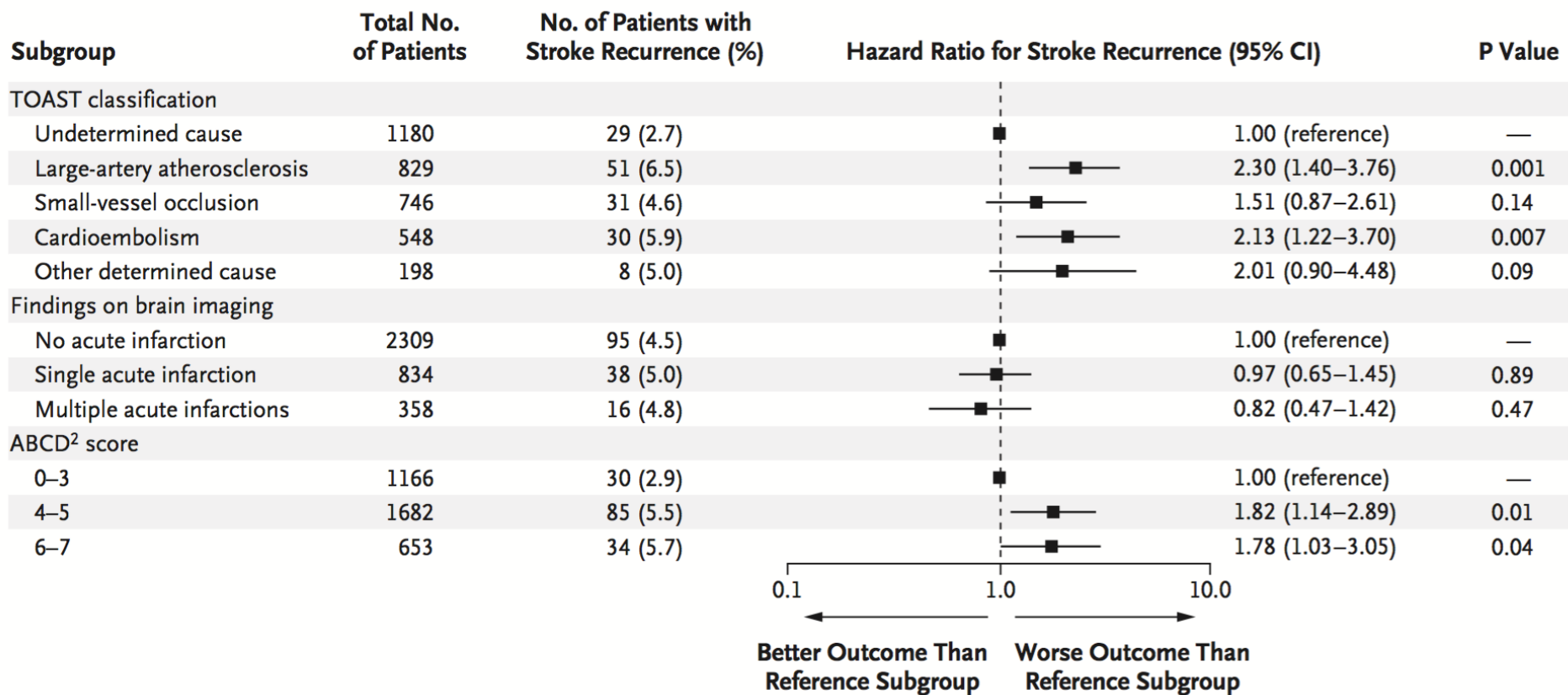
10.6% (9.6 to 11.7%)

Stroke or TIA

621

16.8% (15.6 to 18.1%)

Landmark analysis From Year 1 to Year 5



Conclusions

- The 5-year risk of major cardiovascular event after a TIA or a minor ischemic stroke is 12.9% with half of the event occurring between year 1 and year 5
- The 5-year recurrent stroke rate was 9.5%
- Despite an optimal prevention, including antithrombotic, blood pressure lowering and lipid lowering therapy
- There may be potential for reducing recurrent strokes further by new secondary prevention measures.



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Five-Year Risk of Stroke after TIA or Minor Ischemic Stroke

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