

# *The* American Journal of Cardiology

## *Usefulness of Antithrombotic Therapy in Patients With Atrial Fibrillation and Acute Myocardial Infarction*

*Patrícia O. Guimarães, MD, PhD, Pearl Zakrofsky, MPH, Abhinav Goyal, MD, Renato D. Lopes, MD, PhD, Lisa A. Kaltenbach, MS, Tracy Y. Wang, MD, MHS, MSc*

*American Journal of Cardiology*  
Volume 123, Issue 1, Pages 12-18 (January 2019)  
DOI: 10.1016/j.amjcard.2018.09.031



Table 1

Patterns of pre-admission and discharge antithrombotic treatment among patients with previous atrial fibrillation ( $\text{CHA}_2\text{DS}_2\text{-VASc} \geq 2$ ) and coronary artery disease admitted for acute myocardial infarction categorized by treatment type

	Preadmission (N = 15,034)	Discharge (N = 15,034)	Discharge among patients who underwent PCI (N = 7,917)
No therapy	1732 (12%)	70 (1%)	3 (0.04%)
Monotherapy			
Aspirin only	4260 (28%)	1576 (11%)	81 (1%)
P2Y <sub>12</sub> inhibitors only	584 (4%)	89 (1%)	41 (1%)
Anticoagulant only	1576 (11%)	168 (1%)	13 (0.2%)
Dual therapy			
Aspirin + P2Y <sub>12</sub> inhibitors	3067 (20%)	7123 (47%)	4831 (61%)
Aspirin + anticoagulant	2615 (17%)	2325 (16%)	129 (2%)
P2Y <sub>12</sub> inhibitors + anticoagulant	387 (3%)	219 (2%)	98 (1%)
Triple therapy	813 (5%)	3464 (23%)	2721 (34%)
Any therapy			
Any aspirin	10755 (72%)	14488 (96%)	7762 (98%)
Any P2Y <sub>12</sub> inhibitors	4851 (32%)	10895 (73%)	7691 (97%)
Any anticoagulant	5391 (36%)	6176 (41%)	2961 (37%)

Data are number (%).

$\text{CHA}_2\text{DS}_2\text{-VASc}$  = Congestive heart failure; Hypertension; Age  $\geq 75$  years; Diabetes mellitus; prior Stroke or TIA or thromboembolism; Vascular disease; Age 65-74 years; Sex category; PCI=percutaneous coronary intervention.

Table 2

Patterns of preadmission and discharge antithrombotic treatment among patients with previous atrial fibrillation ( $\text{CHA}_2\text{DS}_2\text{-VASc} \geq 2$ ) and coronary artery disease admitted for acute myocardial infarction categorized by drug type

	<u>Preadmission antithrombotic treatment</u>	<u>Discharge antithrombotic treatment</u>	<u>Discharge among patients who underwent PCI</u>
	(N = 15,034)	(N = 15,034)	(N = 7917)
Anticoagulants	5391 (36%)	6176 (41%)	2961 (37%)
Warfarin	4012 (74%)	4536 (73%)	2139 (72%)
Dabigatran	232 (4%)	224 (4%)	127 (4%)
Rivaroxaban	555 (10%)	560 (9%)	276 (9%)
Apixaban	592 (11%)	856 (14%)	419 (14%)
P2Y <sub>12</sub> inhibitors	4851(32%)	10,895 (73%)	7691 (97%)
Clopidogrel	4371 (90%)	8775 (81%)	5818 (76%)
Ticagrelor	228 (5%)	1402 (13%)	1253 (16%)
Prasugrel	252 (5%)	718 (7%)	620 (8%)

Data are number (%).

$\text{CHA}_2\text{DS}_2\text{-VASc}$  = Congestive heart failure; Hypertension; Age  $\geq 75$  years; Diabetes mellitus; prior Stroke or TIA or thromboembolism; Vascular disease; Age 65-74 years; Sex category; PCI=percutaneous coronary intervention.

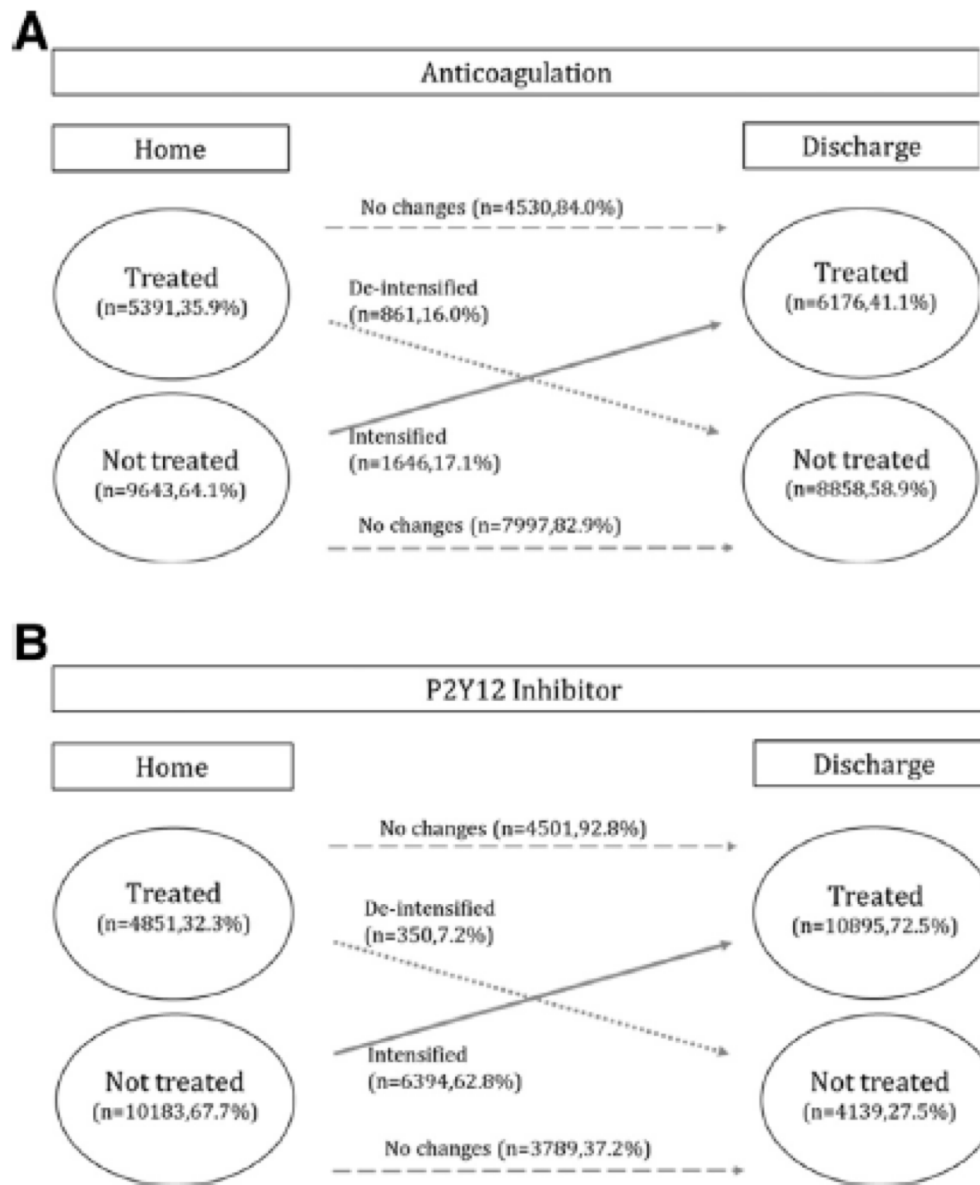


Figure 1. Changes between admission and discharge in (A) anticoagulation therapy and (B) P2Y<sub>12</sub> inhibitors.

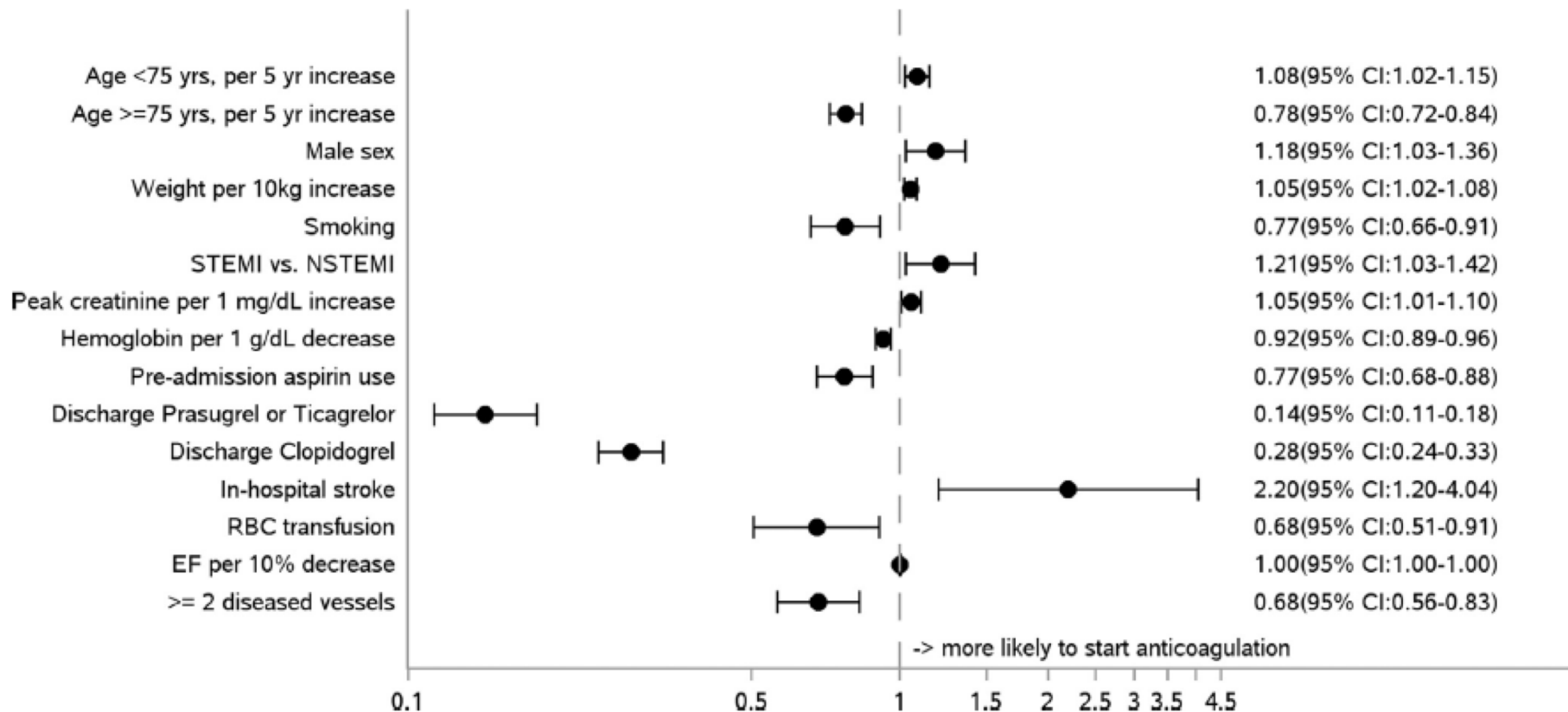


Figure 2. Association between clinical characteristics and starting anticoagulation at admission in the multivariable model. CABG = coronary artery bypass grafting; CI = confidence interval; EF = ejection fraction; NSTEMI = non-ST-segment elevation myocardial infarction; RBC = red blood cell; PCI = percutaneous coronary intervention; STEMI = ST-segment elevation myocardial infarction.

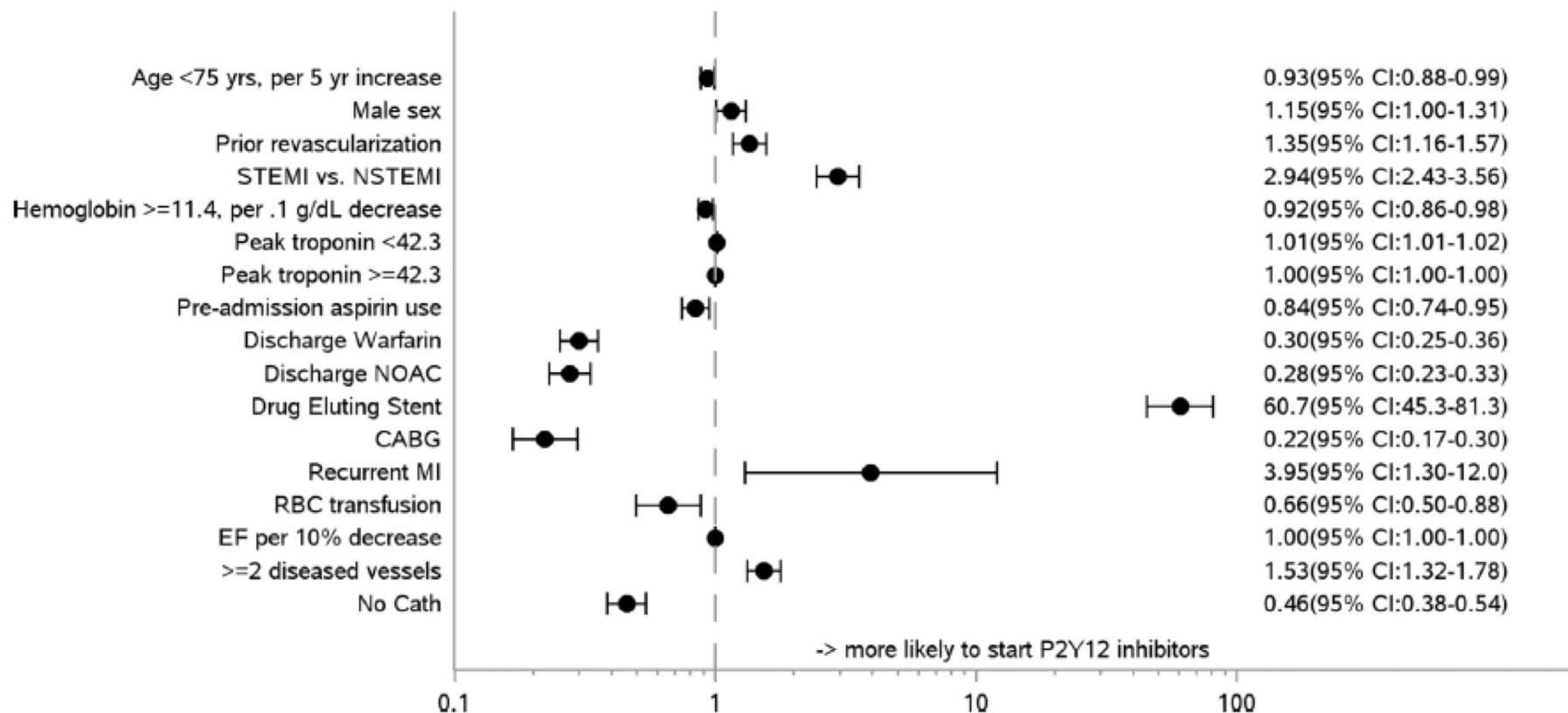


Figure 3. Association between clinical characteristics and starting P2Y<sub>12</sub> inhibitors at admission in the multivariable model. CABG = coronary artery bypass grafting; CI = confidence interval; EF = ejection fraction; MI = myocardial infarction; NOAC = non-vitamin K antagonists oral anticoagulants; NSTEMI = non-ST-segment elevation myocardial infarction; PCI = percutaneous coronary intervention; RBC = red blood cell; STEMI = ST-segment elevation myocardial infarction.