

# Interdisciplinary intervention to improve antithrombotic therapy after urgent coronary artery bypass-grafts: a cohort study

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## Background

European guidelines recommend a **dual antiplatelet therapy (DAPT)** after **acute coronary syndrome (ACS\*)**, regardless of the revascularization method<sup>1</sup>.



### Theory vs Reality

After **coronary artery bypass graft (CABG)**, DAPT is not prescribed systematically mainly because of concerns about bleeding risk.



## Aim

Can the dissemination of an **internal protocol on post-operative antithrombotic therapy** prescription improve European guidelines adherence in patients undergoing **CABG after ACS**?

## Conclusion

**Yes**, guidelines adherence in terms of antithrombotic therapy in ACS patients after CABG increased significantly, without increasing major bleeding events.

## Method

Retrospective data collection

**Group 1**  
CABG surgery  
Jan 2018 - Dec 2020  
**Before**

\*\*Interdisciplinary collaboration:  
one pharmacist, two cardiologists and one cardiac surgeon



Weekly dissemination of an **antithrombotic therapy protocol\*\*** after urgent CABG

**Group 2**  
CABG surgery  
Jan 2021 - Dec 2022  
**After**



Thrombotic therapy	Group 1 (n=152)	Group 2 (n=107)	p-value
UA*	16.7%	20.0%	0.65
NSTEMI*	40.0%	69.2%	<0.001
STEMI*	66.7%	57.1%	0.12

### Primary outcomes

Guidelines adherence if postoperative DAPT<sup>1</sup>, SAPT<sup>2</sup> + OAC<sup>3</sup> or TAT<sup>4</sup>

<sup>1</sup>Dual antiplatelet therapy, <sup>2</sup>Single antiplatelet therapy  
<sup>3</sup>Oral anticoagulation, <sup>4</sup>triple antithrombotic therapy



### Secondary outcomes

Major bleeding events during the hospital stay and at 12 months after surgery

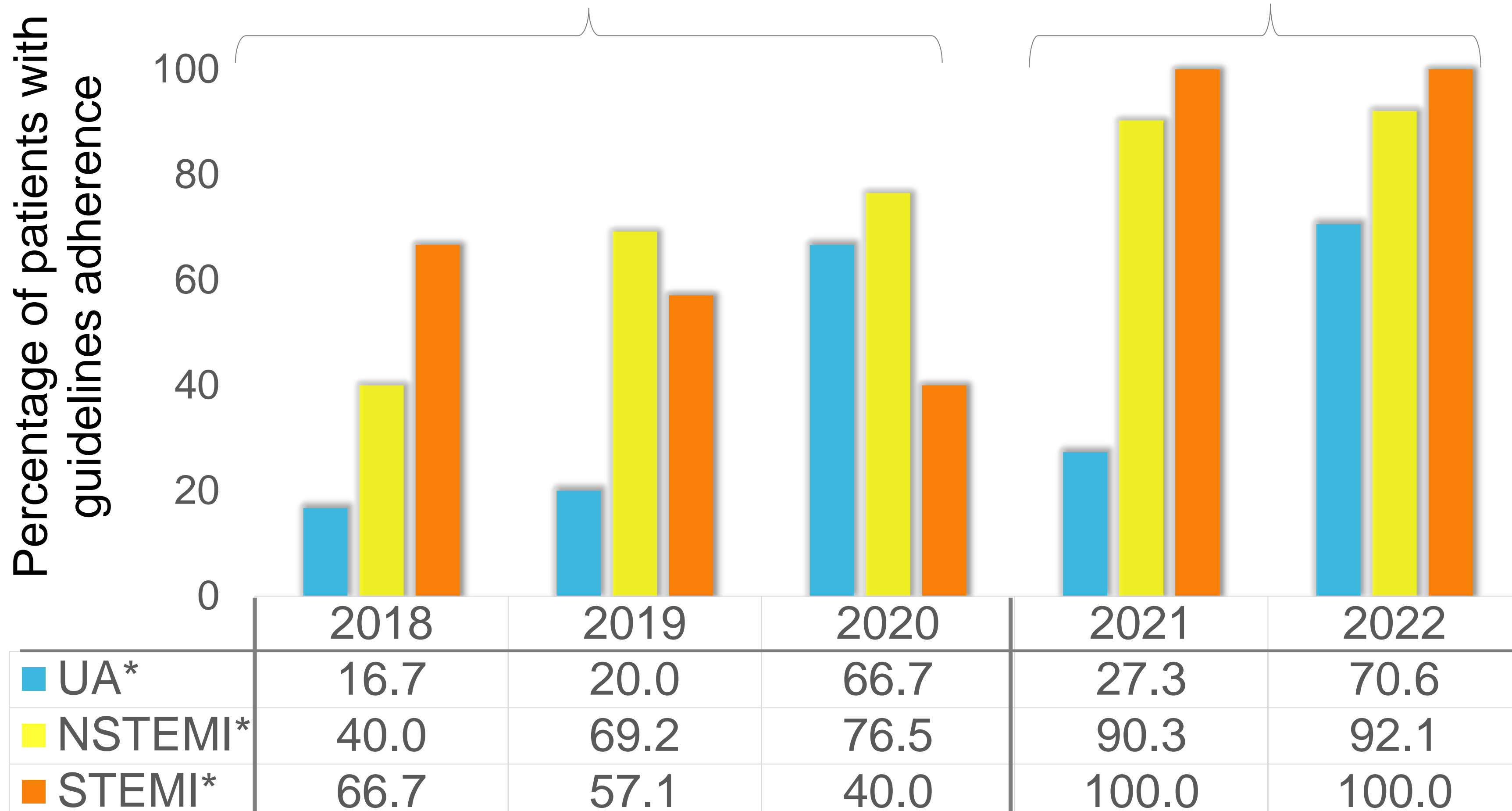


## Results

### Primary outcomes

Guidelines adherence in terms of antithrombotic therapy

Group 1 (58.6%) **p < 0.001** Group 2 (82.2%)



Group 1 = 152 included patients vs Group 2 = 107 included patients

### Demographic results

- Total of **259 included patients**: men 83.8%, median age 67 [58;74] years
- Two groups: similar demographic characteristics except for smoking status and type of ACS\* events

### Secondary outcomes

Major bleeding events

**During the hospital stay:**  
9 (5.9%) in Group 1 vs 2 (1.9%) in Group 2 (**p = 0.130**)

**At 12 months after surgery:**  
7 (4.6%) in Group 1 vs 3 (2.8%) in Group 2 (**p = 0.531**)

\*Three presentation of ACS: unstable angina (UA), non st-elevation myocardial infarction (NSTEMI) and st-elevation myocardial infarction (STEMI)