Background. Proper antithrombotic management of patients with AF and ACS is challenging. The current ESC guidelines in 2014 recommend ‘triple therapy’ with OAC plus aspirin and clopidogrel for 1 or 6 months titrated to double therapy for 6 or 11 months. The effectiveness and safety of double therapy with rivaroxaban plus clopidogrel for 12 months are uncertain in such scenario.

Methods. Single-center non randomized prospective trial enrolled 100 participants with AF who had UA/NSTEMI treated either medically or underwent PCI. Fifty patients received rivaroxaban 20mg once daily plus clopidogrel (75mg) for 12 months (group:1). Another 50 patients received triple then double therapy of dose-adjusted vitamin K antagonist plus (clopidogrel and aspirin) according to ESC guidelines up to 12 months (group:2). The primary outcome was the combination of minor and major non CABG TIMI bleeding up to 12 months. The secondary outcomes were major adverse cardiovascular events (cardiac mortality, non fatal MI, stent thrombosis or stroke). Results Rates of both minor and major bleeding were lower in Group:1 (Rivaroxaban plus clopidogrel) but with no significant differences (OR=0.73 [95% CI=0.73to1.4]; NNT=12.5; P=0.58). RRR of bleeding rates in the rivaroxaban group was (25 to 27%). The composite rates of MACCE showed no significant differences in both groups (36% vs 30%, OR=1.14 [95% CI=0.6to2.0]; P=0.652). In subgroup analysis, patients in group:1 who treated with PCI had lower rates of non fatal MI and definite stent thrombosis in comparison to group:2 (RRR=16%; P=0.63).

Conclusion. Rivaroxaban (20 mg OD) plus clopidogrel (75 mg) for 12 months was safe and effective in participants with AF and UA who treated medically or PCI. We recommend this regimen over standard triple therapy with a dose-adjusted vitamin K antagonist. This regimen provide better adherence and advantage that patients do not need to switch from triple to dual therapy.

Keywords Atrial fibrillation; Unstable angina; Rivaroxaban.