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## BACKGROUND

Although cancer and AF are frequently co-existing conditions, evidence supporting the use of DOACs in cancer patients is limited.

## METHODS

Consecutive patients with NVAf and cancer from the *Real Life Cohort Project* were enrolled in this observational study in order to assess the safety of DOACs in patients with active cancer in our Onco-Thrombosis Unit. The primary outcome was safety and was determined by the number and type of bleeding using the ISTH Criteria (Table 1). Statistical analysis was performed with SPSS software (version 21) and values  $p < 0.05$  were considered statistically significant.

**TABLE 1. SAFETY OUTCOMES:  
TYPE OF BLEEDING (LOCATION OF TUMOR)**

Location of tumor	TYPE OF BLEEDING N =24			TOTAL (%)
	Minor	Relevant	Major	
Breast	3	-	-	3 (12.5)
Genitourinary	4	1	1	6 (25.0)
Lung	1	-	-	1 (4.2)
Digestive	2	1	-	3 (12.5)
Hepatobiliary	-	1	-	1 (4.2)
Linfoproliferative n.	2	5	1	8 (33.3)
Multiple myeloma	-	1	-	1 (4.2)
Melanoma	1	-	-	1 (4.2)
TOTAL	13	9	2	24 (100)

**TABLE 2. SEVERITY OF BLEEDING AND TYPE OF DOAC**

DOAC	No bleed	Bleed			TOTAL	
		Minor	Relevant	Major		
DABIGATRAN	10 (83.3%)	2 (16.7%)	2	-	12	
RIVAROXABAN	32 (80%)	8 (20%)	2	5	1	40
APIXABAN	35 (74.5%)	12 (25.5%)	8	3	1	47
EDOXABAN	15 (88.2%)	2 (11.8%)	1	1	-	17

**TABLE 3. LOCATION OF BLEED AND TYPE OF DOAC**

Location of bleed	DOAC				TOTAL
	DABIGATRAN	RIVAROXABAN	APIXABAN	EDOXABAN	
G.I tract		3	4		7
G.U tract		3	7	1	11
Mucosa's	1			1	2
Hemoptysis	1	2	1		4
TOTAL	2	8	12	2	24

## RESULTS

We considered 1443 patients with NVAf treated with DOAC of which 116 patients had active cancer (solid cancer 71% with breast and genitourinary the more frequent locations); 12 patients received dabigatran (10%), 40 received rivaroxaban (35%), 47 received apixaban (40%) and 17 received edoxaban (15%). 58 patients (50%) received anti-cancer therapy during antithrombotic therapy, and 40 patients (34%) had an advanced disease. After a mean follow-up of 13 months, 24 patients (20.7 %) had a bleeding event. There were 2 episodes of major bleeds (1.7%), 9 clinically relevant non-major bleeds (7.8%) and 13 non-major bleeds (11.2%) (Table 2). The site of bleeding was gastrointestinal in 7 patients, genitourinary in 11, epistaxis in 2 and hemoptysis in 4 (Table 3). There were no strokes or systemic embolisms. The mortality related to the disease was 19.8%, there were no fatal haemorrhages.

## DISCUSSION

Our study is the first that prospectively and consecutively provide a real-life picture of the performance of 4 DOACs as an attractive alternative to LMWH in cancer patients