



START-Register

SURVEY ON ANTICOAGULATED PATIENTS – REGISTER

Registro computerizzato per la raccolta dei dati di pazienti trattati cronicamente con anticoagulanti

Risultati dal Registro START

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Cremona

4 marzo 2016



Fondazione Arianna Anticoagulazione

www.anticoagulazione.it





Registro Start



Simple Start



Start Eventi



**Start
Antiplatelet**



FADOI Start

↓
**9670 patients
75% with fup**

↓
117 events

↓
**674 patients
40% with fup**

↓
310 patients

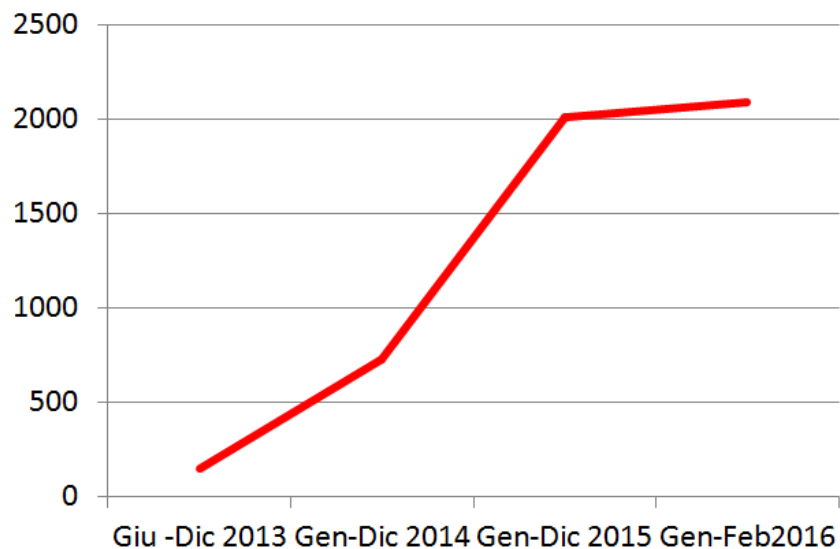
Start oncology.....



**Start
laboratorio**

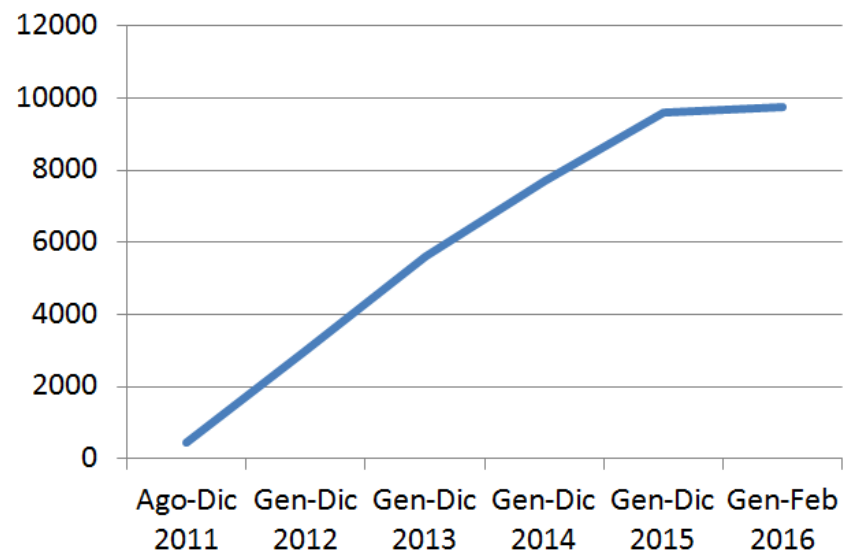
Per richieste di assistenza contattare:
info@start-register.org





**DOACS Patients:
2090**

**Number of enrolled patients:
9760**



**Enrolled patients 9760****(54% M - 46%F)****Median age 74 yrs, IQ range 64-84 yrs****Indication to Anticoagulant treatment**

Non Valvular AF	62%
Venous Thromboembolism	29%
Atrial Fibrillation	2.4%
Prosthetic heart valves	3.0%
Other indications	4.0%

DOACS shifted from VKA 46%
Median Time of VKA (IQR) 24 (8,50) months

Drugs

VKA	76%
DOACs	22%
LMWH (chronic)	2%

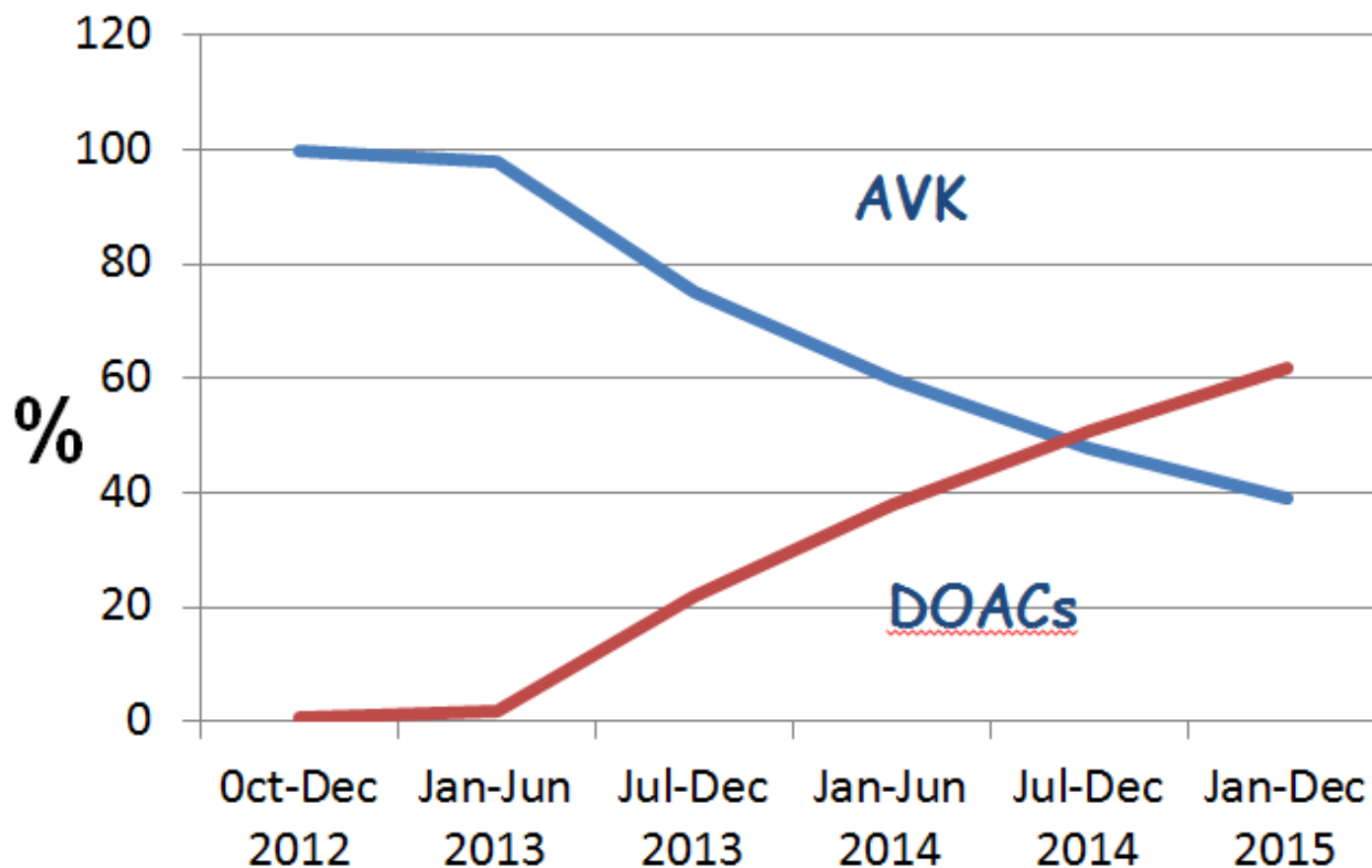
Bridging Therapy

LMWH	49%
Fondaparinux	1.0%

Total follow-up: 10.250 pt-yrs
available for 75% of patients

Lost at follow-up
3.0%

Distribution of patients in relation to anticoagulant prescription October 2012-December 2015





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I pazienti in trattamento con DOAC

Characteristic of patients in relation to indication

	VTE	AF
Number	467	867
Median Age, y (IQR)	61 (46,73)	76.5 (71,82)
Males (%)	55.3	58.2
Type of DOACs		
Apixaban	0.3%	29%
Dabigatran	1.7%	44%
Rivaroxaban	98%	27%
Discontinuation %	35	10.8
End of treatment	84.8	-
Major bleeding	0.6	6.9
Controindication	2.4	2.6
Death	3.0	3.0
Patient Decision	0.6	1.3
Lost at follow-up	1.1	3.5

Characteristic of patients

	All	Dab	Riva	Apix
Number	867	381	235	251
Median Age, y (IQR)	76.5 (71,82)	75 (69,80)	79 (73,83)	77 (72,83)
Males (%)	479 (55)	64	53.6	51
Past medical history %				
Previous Stroke/TIA	22.4	20.2	23	25.5
Previous Major Bleeding	7.9	5.5	8.1	13.2
Coronary artery disease %	14	9.2	16	17.9
Antiplatelet drugs %	7.8	6.5	7.2	10
Active cancer %	2.4	1.8	0.9	4.8
CrCL 30-60 ml/min %	35	29.7	36.6	42.7
CrCL <30 ml/min %	1.3	0.3	1.3	2.8
Shift from VKA %	46	45.4	46.4	45.4

Bleeding and thrombotic events

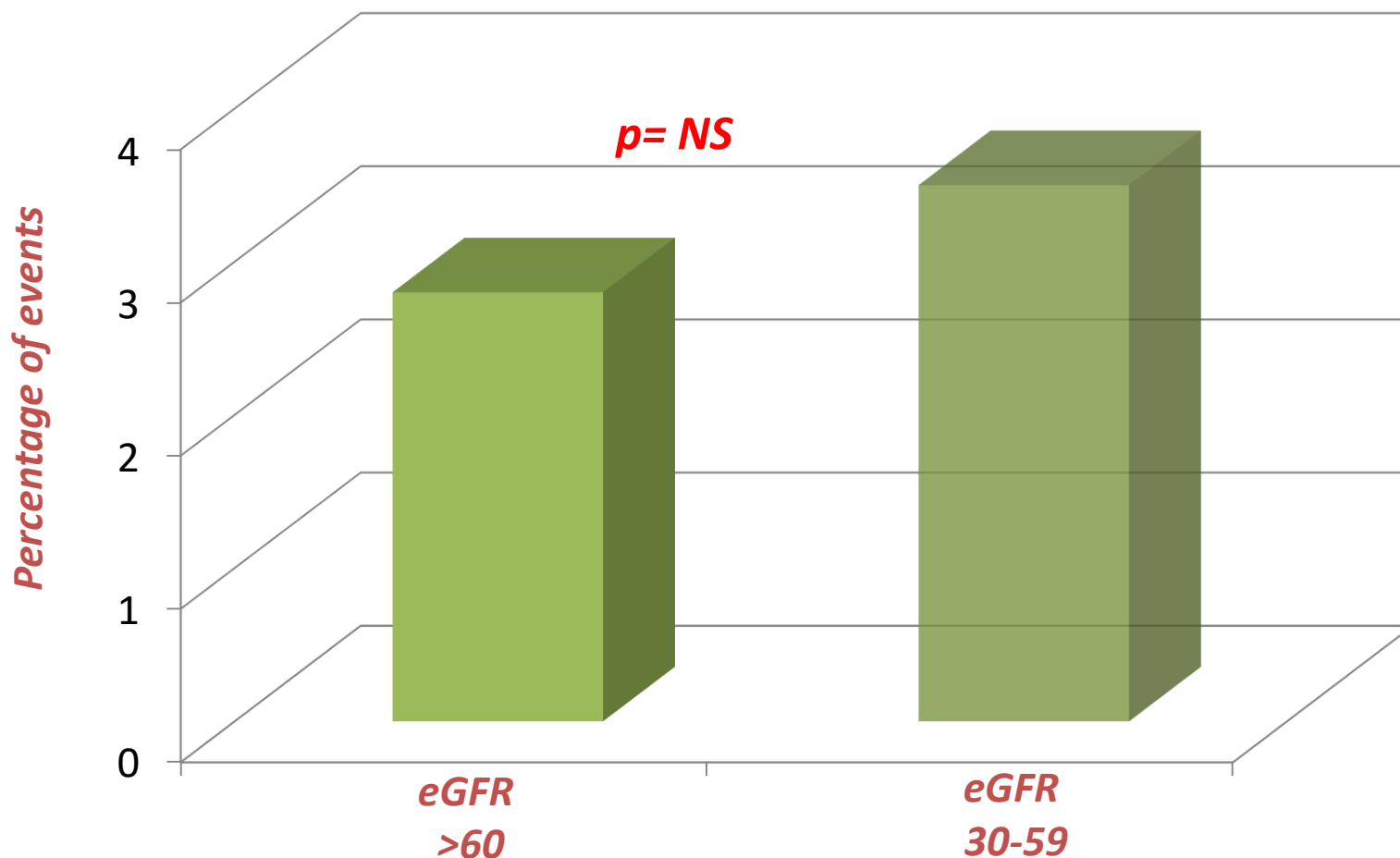
	All	Dab	Riva	Apix
Fup (pt-yrs)	1025	562	283	251
Major bleeding rate: % pt ; x100 pt yrs	27 (3.1;2.53)	10* (2.6;1.78)	11 (4.7;3.8)	6** (2.39;3.3)
Cerebral	6	2	2	2
Gastrointestinal	11	6	3	2
Other	10	2	6	2
NMCRB Rate:%pt; x100 pty rs	16 (1.8;1.56)	10 (2.6;1.77)	4 (1.7;1.4)	2 (0.8;1,1)
Thromboembolic events Rate: %pt; x100 pt yrs	9 (1.0; 0.78)	6 (1.57;1.06)	1 (0.42;0.35)	2 (0.8;1.1)

Fatal bleeding

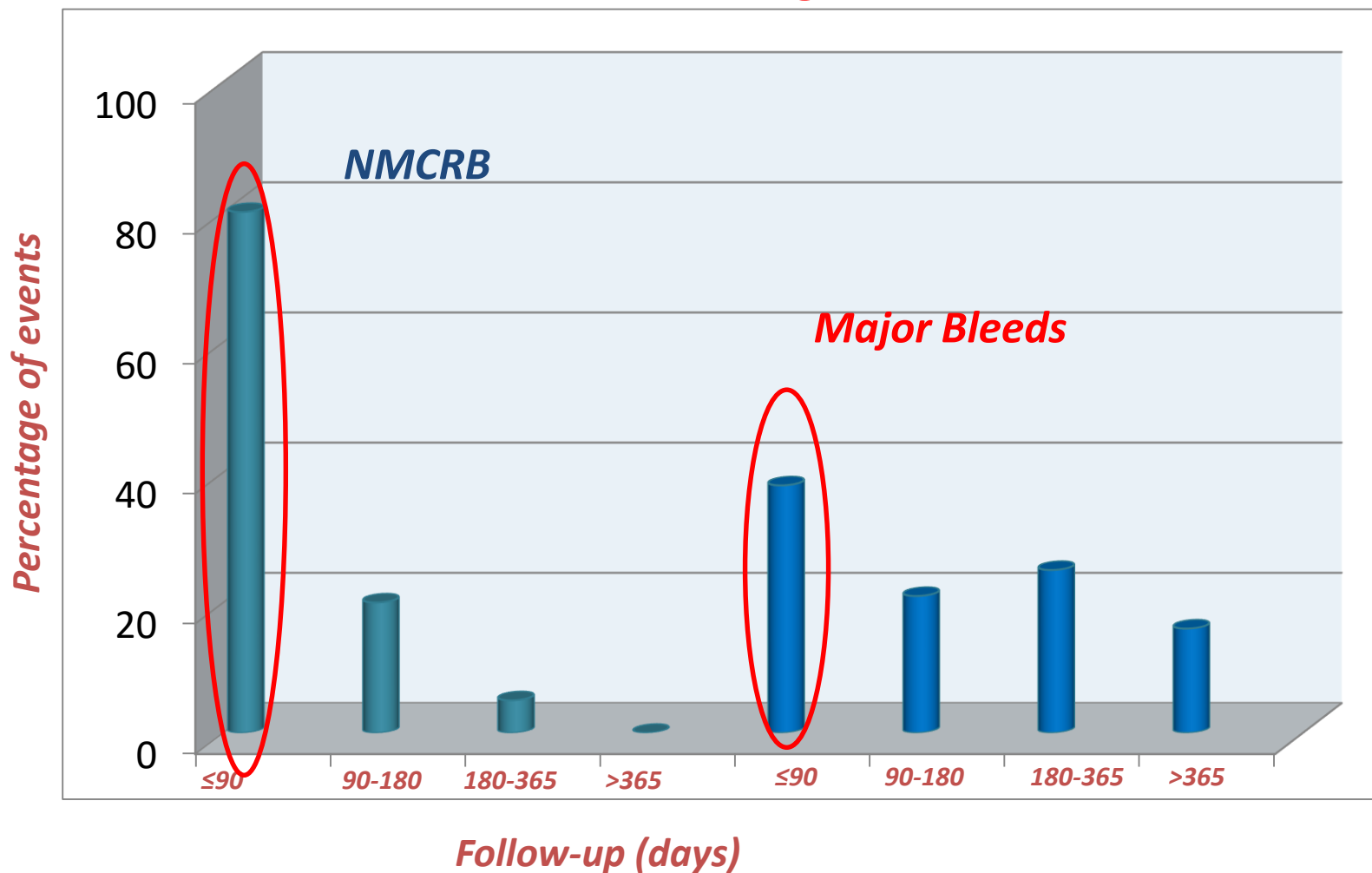
* cerebral

**1 cerebral; 1 other

Major bleeding events in relation to renal impairment



Time of bleeding events



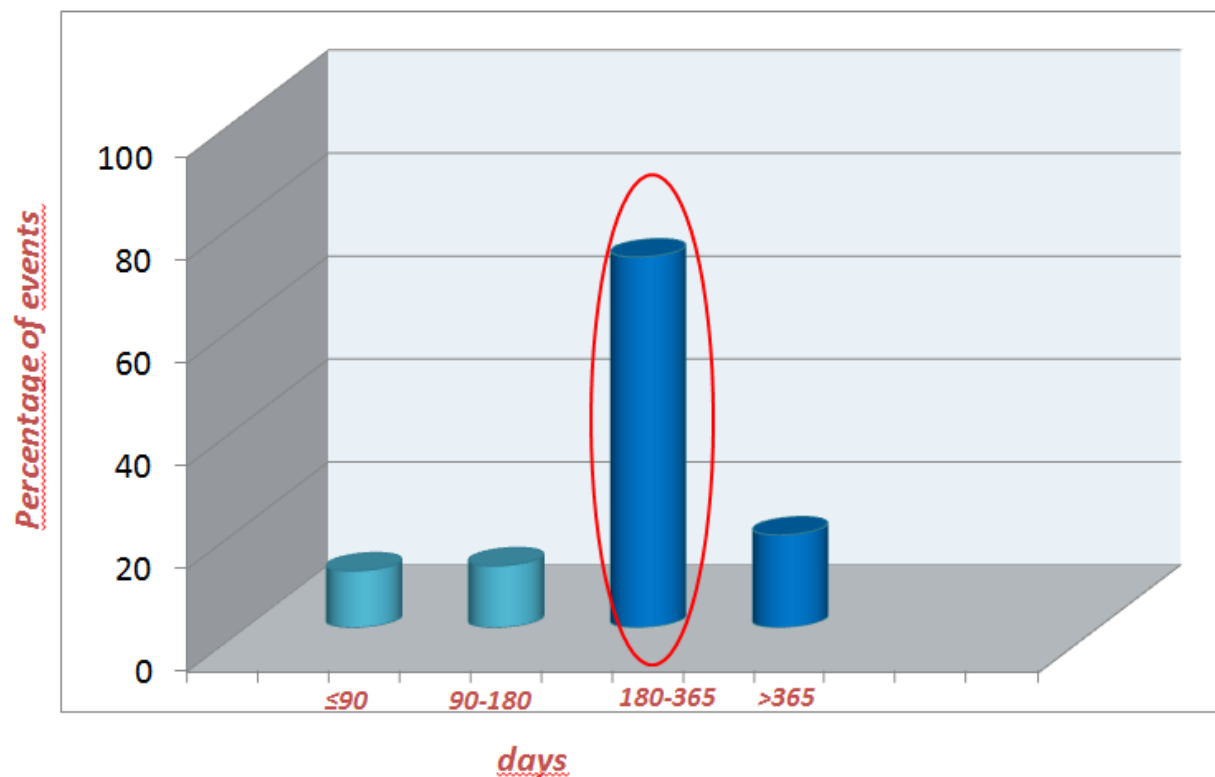
NMCRB *n= 16 (1.56)*

MB *n=27 (2.53)*

Thrombotic events during treatment

Number		9
rate: % pt ; x100 pt yrs		1.19; 1.69

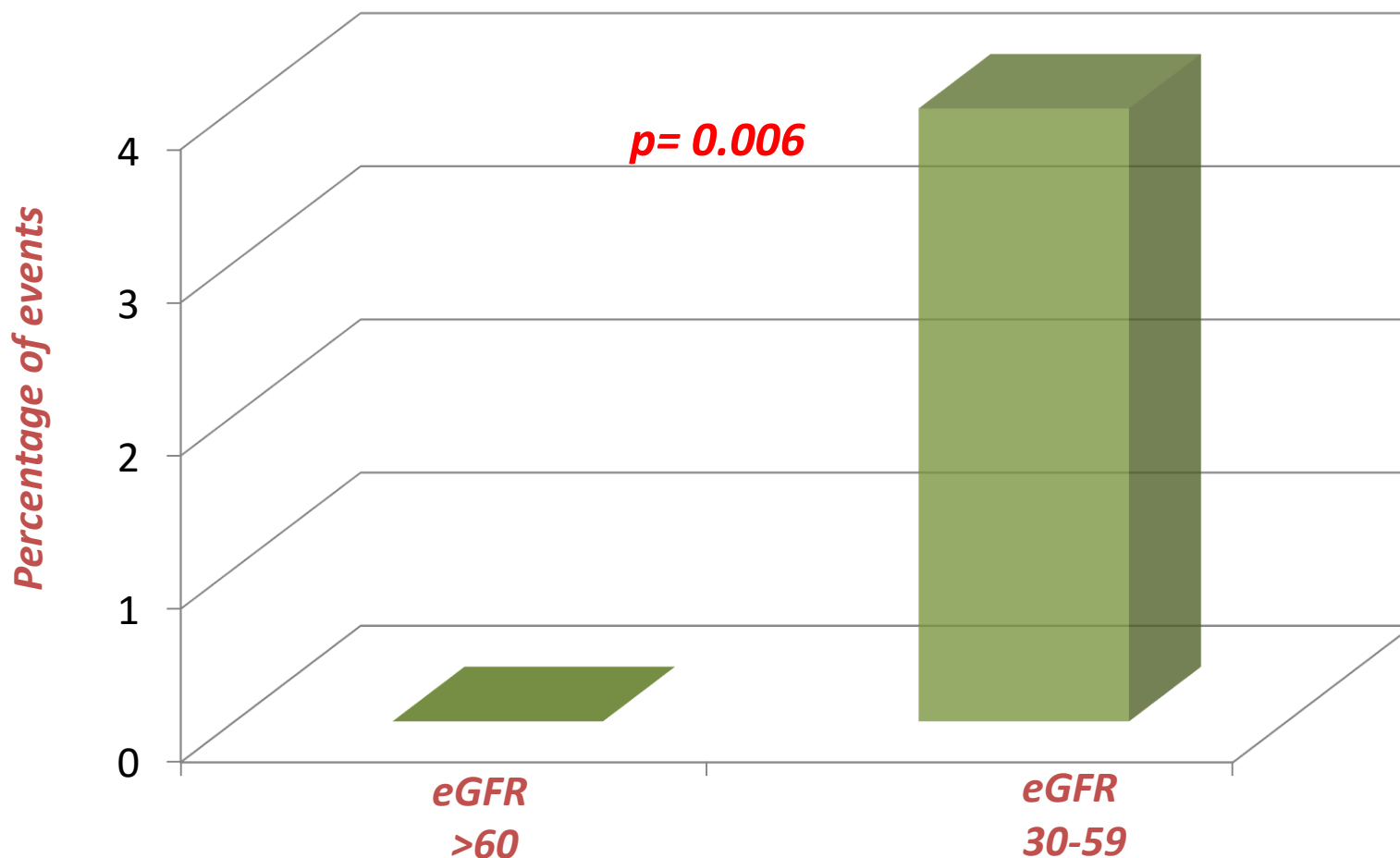
Time of thrombotic events



Characteristic of patients

Number		467
Median Age, y (IQR)		61 (46,73)
Males (%)		272 (58.2)
Thrombophilia		18.7
Past medical history		
Previous Stroke/TIA		3.6%
Previous Major Bleeding		4.3%
Active cancer		2.8%
CrCL 30-60 ml/min		14%
CrCL <30 ml/min		-
Naive pts (%)		328 (70)

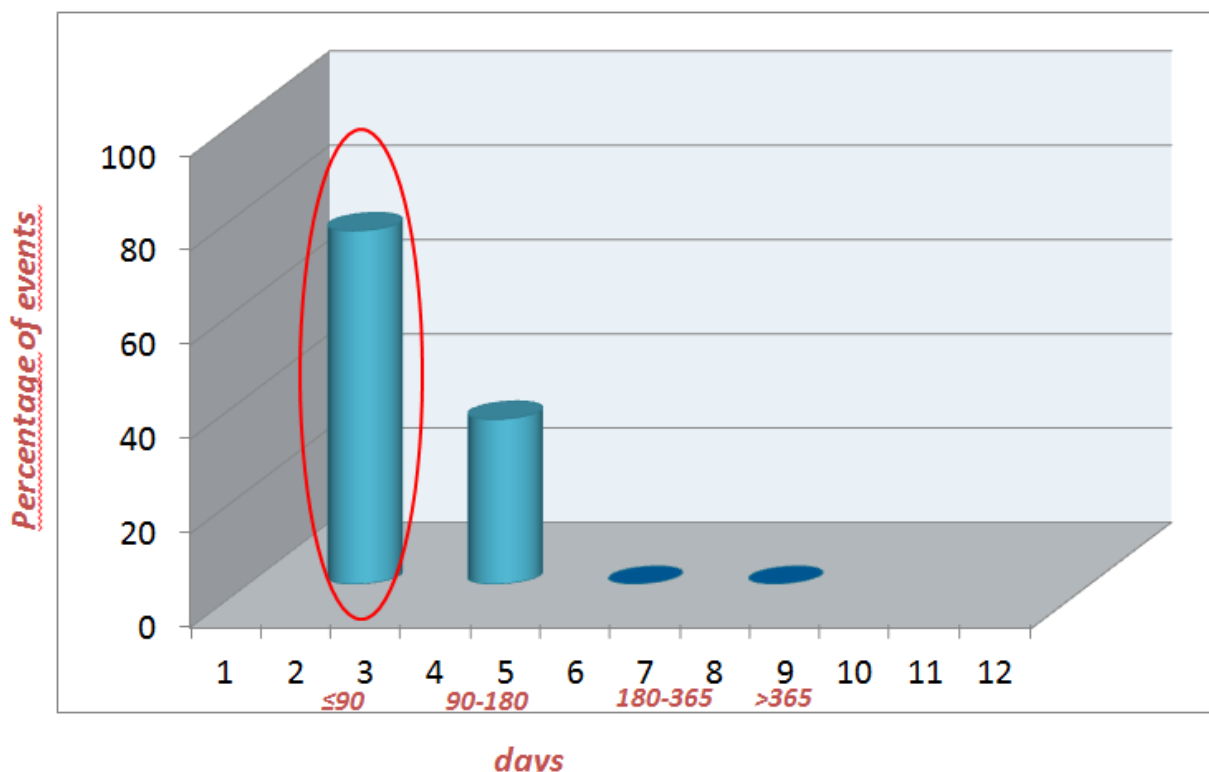
Major bleeding events in relation to renal impairment



Bleeding events

	NMCRB	Major bleeding
Fup (pt-yrs) 289		
rate: % pt; x 100 pt- yrs	2 0.5; 0.7	3 0.64; 1.0

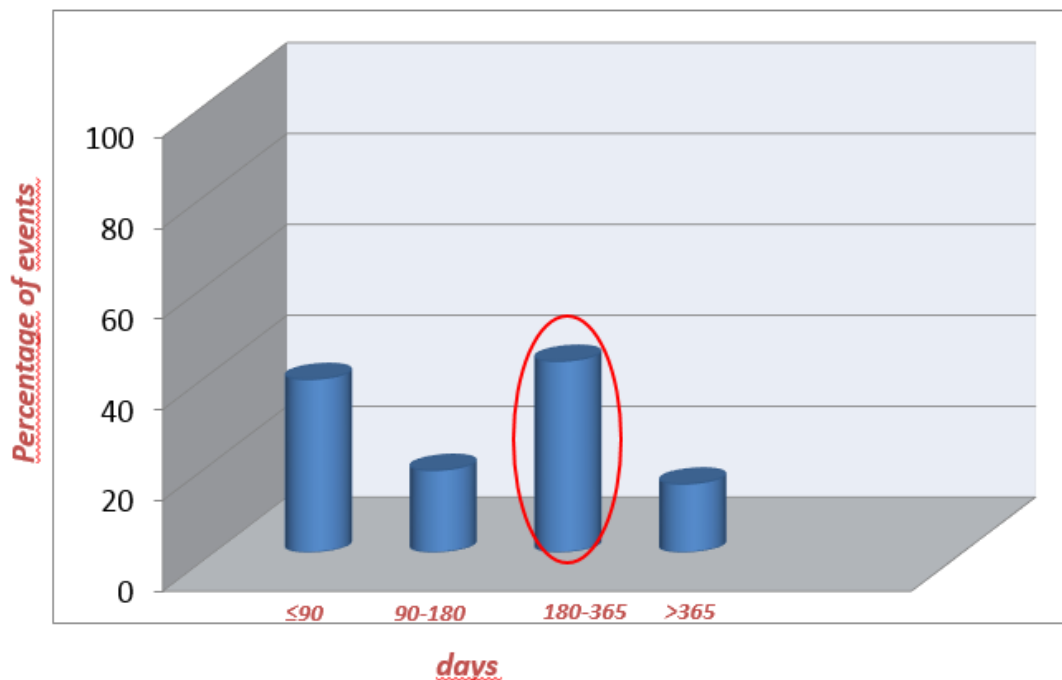
Time of major bleeding events



Thrombotic events during treatment

Number		9
rate: % pt ; x100 pt yrs		2.2; 3.4

Time of Thrombotic events



Other adverse events

	DOACS
Number	25/1200
Pirosi/ dispepsia	11
Diminuzione eGFR	5
Allergia	6
Aumento delle transaminasi	3

**Comparison with clinical trials**

	RELY	START		ARISTOTLE	START
Age yrs	71.5±8.8	74±8.3		70 (63,76)	77 (72,83)
Male Sex (%)	64.3	64		64.5	51
CHADS ₂ m ±SD	2.2±1.1	2.0±1.18		2.1±1.1	2.29±1.6
M Bleed	3.11	1.78		2.13	3.3
Cerebral	0.32	0.35		0.33	1.1
CRNMB	NA	1.77		4.07	1.1

Comparison with clinical trials and real life data

	ROCKET	START	XANTUS	Tamayo Medi Care	Dresda Registry
Age yrs	73 (65,78)	75 (69,80)	71.5±10	71.5±10	74±14
Male Sex (%)	60.3	64	59	55	51
CHADS ₂ m±SD	3.48±0.94	2.4±1.3	2.1±1.2	2.6±1.2	NA
M Bleed	3.6	3.8	2.1	2.86	3.4
Cerebral	0.5	0.7	0.4	NA	NA
CRNMB	11.8	1.4	12.9	NA	19.7

Organizzazione follow-up

- ☐ Prescrizione del farmaco
- ☐ Controllo ad un mese dalla prescrizione
- ☐ Controllo a 6 mesi dalla prescrizione
- ☐ Controllo a 12 mesi dalla prescrizione

- ☐ Controllo a 24 mesi dalla prescrizione

Lost at follow-up
3.0%

VKA= 3.5%

DOACs= 2.3%

Commenti (1)

- 🌀 Crescita di arruolamento di DOACs
 - Analisi preliminare mettendo insieme i DOACs
- 🌀 Follow-up ancora insufficiente per i DOACs (?)
- 🌀 Pazienti un po' più critici in Apixaban
- 🌀 Alta percentuale di pazienti con pregressa emorragia
 - Concordanza con i risultati dei trial e per Riva anche con i dati di vita reale



Commenti (2)

- 🌀 Importante la funzione renale per emorragie
 - 🌀 Molto rilevante la funzione renale in DOACs trattati per VTE
 - 🌀 Emorragie da DOACs prevalentemente precoci
 - 🌀 Eventi trombotici in DOACs più distribuiti nel tempo (aderenza?)
- Importanza di un follow-up strutturato





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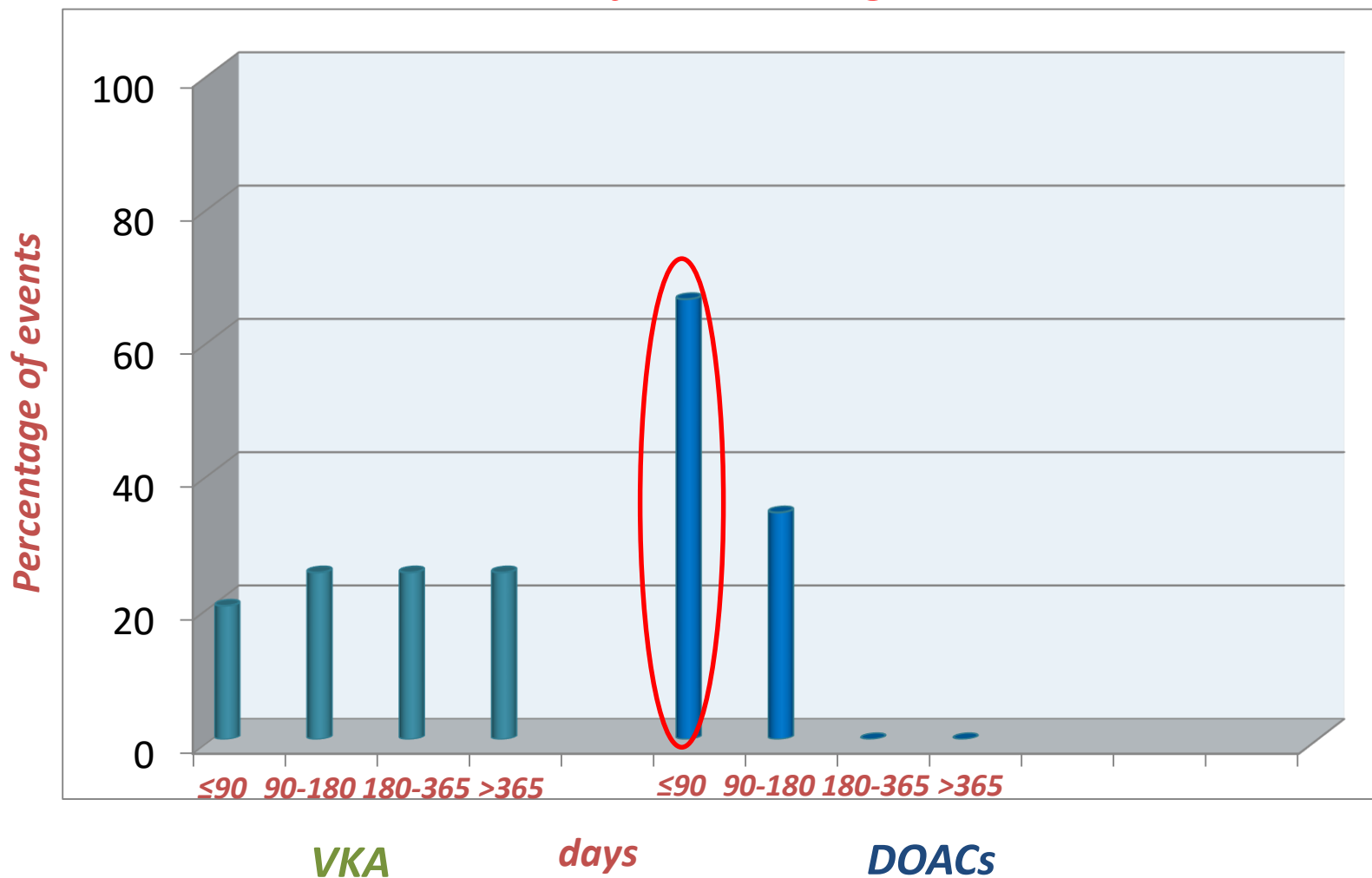


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Time of major bleeding events



Time of major bleeding events

