



PRACTICE AID

Stroke and Bleeding Outcomes in NVAF Using OACs: Clinical Trial Data vs Real-World Evidence^a

Full abbreviations, accreditation, and disclosure information available at [PeerView.com/WQZ40](https://www.peerview.com/WQZ40)

PeerView
Family Practice



		RCTs ¹⁻³	ARISTOPHANES ⁴⁻⁹					
		Pooled ^b (N = 50,578)	Overall (N = 434,046)	Severe Obesity (n = 34,942)	Active Cancer (n = 40,271)	Very Old ^c (n = 103,525)	Diabetes (n = ~59,345 ^d)	Older Frail (n = 150,487)
CHA₂DS₂-VASc	–	2.1-3.5	3.5-3.9	3.6-3.9	3.9-4.1	4.7-4.8	NR	5.1-5.2
Stroke/SE	Apixaban	1.3	1.3	1.3	1.5	1.8	1.9	2.2
	Dabigatran	1.1	1.4	1.5	1.9	2.2	1.9	2.6
	Rivaroxaban	2.1	1.5	1.3	1.8	2.2	2.0	2.5
	Warfarin	1.6-2.4	1.7-1.9	1.6-1.9	2.2-2.4	2.9-3.0	2.3-2.5	3.1
Major bleeding	Apixaban	2.1	3.6	4.6	6.0	5.0	4.8	6.1
	Dabigatran	3.1	3.6	5.7	5.6	6.3	4.7	7.1
	Rivaroxaban	3.6	5.8	8.3	8.6	8.5	7.2	10.2
	Warfarin	3.1-3.4	5.1-5.6	7.4-7.8	7.4-9.4	6.9-7.8	6.2-8.1	8.9-9.0

- Trend toward increasing stroke and bleeding risk going from healthier patients in the RCT patients to older, frail patients¹⁻⁹
- Consistently lower stroke risks with DOACs than warfarin¹⁻⁹
- DOACs always delayed stroke events; apixaban and dabigatran always delayed bleeding, relative to warfarin¹⁰

^a Scores reported as means. All data reported as mean event rates (% per year), rounded to 1 decimal place. All comparisons are for the named agent vs warfarin.

^b ARISTOTLE: N = 18,201; RE-LY: N = 18,113; ROCKET AF: N = 14,264. ^c Aged ≥80 years. ^d Sum of all patients included in the propensity-matched groups.

1. Granger CB et al. *N Engl J Med.* 2011;365:981-992. 2. Connolly SJ et al. *N Engl J Med.* 2009;361:1139-1151. 3. Patel MR et al. *N Engl J Med.* 2011;365:883-891. 4. Lip GYH et al. *Stroke.* 2018;49:2933-2944. 5. Deitelzweig S et al. *J Clin Med.* 2020;9:1633.

6. Deitelzweig S et al. *JACC CardioOncol.* 2021;3:411-424. 7. Lip GYH et al. *J Intern Med.* 2021;289:42-52. 8. Deitelzweig S et al. *J Am Geriatr Soc.* 2019;67:1662-1671. 9. Deitelzweig S et al. *Circulation.* 2018;138:A14898. 10. Deitelzweig S et al. *Eur J Intern Med.* 2023;108:37-42.