LETTER TO EDITOR



## **Reply: Pulmonary thromboembolism in an emergency hospital:** Are our patients different?

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Key words: venous thromboembolism; VTE; pulmonary embolism; PE; novel oral anticoagulants; NOACs.

In their recent work published in the Romanian Journal of Internal Medicine, Balahura *et al.* reviewed the cases of pulmonary embolism (PE) diagnosed in an emergency hospital in Bucharest during a 3 year period from January 2014 to December 2016 [1]. Among their observations was that novel oral anticoagulants (NOACs) were administered in 26.3% of patients diagnosed with PE, while vitamin K antagonists (VKA) were administered in 71.7% of them [1]. The authors state that their study was performed at a time when NOACs were just becoming available in the hospitals of Romania, and they imply that more patients with PE could be treated nowadays with NOACs. However, in other studies from countries

where NOACs had been available for a longer time, like in the USA [2] and in Western Europe [3], there are shown similar percentages of patients treated with NOACs for PE [2, 3], that actually do not exceed 30% of the patients treated. This implies that the numbers noted by Balahura *et al.* are actually showing an unambiguous truth about NOAC use in PE; there is an underlying hesitance to use these new medications even though they are supported by large trials that demonstrate their effectiveness and safety in this patient population [4-8].

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## REFERENCES

- 1. BALAHURA AM, GUȚĂ A, MIHALCEA V, WEISS E, DOROBANȚU M, BARTOŞ D, et al. Pulmonary thromboembolism in an emergency hospital: Are our patients different? Rom J Intern Med. 2017 Jun 27. pii: /j/rjim.ahead-of-print/rjim-2017-0026/rjim-2017-0026.xml.
- 2. STEIN PD, MATTA F, HUGHES PG, HOURMOUZIS ZN, HOURMOUZIS NP, WHITE RM, et al. Home Treatment of Pulmonary Embolism in the Era of Novel Oral Anticoagulants. Am J Med. 2016; **129**(9):974-7.
- 3. COHEN AT, GITT AK, BAUERSACHS R, FRONK EM, LAEIS P, MISMETTI P, et al. The management of acute venous thromboembolism in clinical practice. Results from the European PREFER in VTE Registry. Thromb Haemost. 2017; 117(7):1326-37.
- 4. AGNELLI G, BULLER HR, COHEN A, CURTO M, GALLUS AS, JOHNSON M, et al. Oral apixaban for the treatment of acute venous thromboembolism. N Engl J Med. 2013; **369**(9):799-808.
- 5. HOKUSAI-VTE INVESTIGATORS, BÜLLER HR, DÉCOUSUS H, GROSSO MA, MERCURI M, MIDDELDORP S, et al. Edoxaban versus warfarin for the treatment of symptomatic venous thromboembolism. N Engl J Med. 2013; **369**(15):1406-15.
- 6. EINSTEIN INVESTIGATORS, BAUERSACHS R, BERKOWITZ SD, BRENNER B, BULLER HR, DECOUSUS H, et al. Oral rivaroxaban for symptomatic venous thromboembolism. N Engl J Med. 2010; **363**(26):2499-510.
- 7. EINSTEIN-PE INVESTIGATORS, BÜLLER HR, PRINS MH, LENSIN AW, DECOUSUS H, JACOBSON BF, et al. Oral rivaroxaban for the treatment of symptomatic pulmonary embolism. N Engl J Med. 2012; **366**(14):1287-97.
- 8. SCHULMAN S, KEARON C, KAKKAR AK, MISMETTI P, SCHELLONG S, ERIKSSON H, et al. Dabigatran versus warfarin in the treatment of acute venous thromboembolism. N Engl J Med. 2009; **361**(24):2342-52.

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