IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, August 2023

Stability Studies of Anticoagulant Drugs in Oral Solid Dosage Forms: Impact of Environmental Factors

Kailash Pati Pandey¹, Raman Singh², Dr K Sarvanan³,

Research Scholar, Pharmacy, Bhagwant University Ajmer, Rajasthan, India¹ Research Scholar, Pharmacy, Bhagwant University Ajmer, Rajasthan, India² Professor, Pharmacy, Bhagwant University Ajmer, Rajasthan, India³

Abstract: Stability is a crucial aspect of pharmaceutical formulations, particularly for anticoagulant drugs administered as oral solid dosage forms. This research paper aims to investigate the impact of various environmental factors, such as temperature, humidity, and light, on the stability of anticoagulant drugs in oral solid dosage forms. The study utilized accelerated stability testing under controlled conditions to assess the degradation kinetics and degradation products, providing valuable insights into the formulation's shelf life and storage recommendations. The results of this research will aid in ensuring the efficacy and safety of anticoagulant drugs during their intended shelf life and improve patient care.

Keywords: Anticoagulant, Employee engagement, Oral Solid Dosage, Environmental Factors

REFERENCES

- [1]. Bruce A. Warden, PharmD, BCPS-AQ Cardiology, CLS, FNLA, 3181 SW Sam Jackson Park Rd, Mail Code HRC5N, Portland, OR 97239. E-mail: <u>wardenb@ohsu.edu</u>
- [2]. Aronis KN, Hylek EM. Evidence gaps in the era of non-vitamin K oral anticoagulants. J Am Heart Assoc. 2018; 7:e007338. DOI: 10.1161/JAHA.117.007338.
- [3]. Ruff CT, Giugliano RP, Braunwald E, Hoffman EB, Deenadayalu N, Ezekowitz MD, Camm AJ, Weitz JI, Lewis BS, Parkhomenko A, et al. Comparison of the efficacy and safety of new oral anticoagulants with warfarin in patients with atrial fibrillation: a meta-analysis of randomised trials. Lancet. 2014; 383:955–962...
- [4]. van der Hulle T, Kooiman J, den Exter PL, Dekkers OM, Klok FA, Huisman MV. Effectiveness and safety of novel oral anticoagulants as compared with vitamin K antagonists in the treatment of acute symptomatic venous thromboembolism: a systematic review and meta-analysis. J ThrombHaemost. 2014; 12:320–328.
- **[5].** Kapoor A, Ellis A, Shaffer N, Gurwitz J, Chandramohan A, Saulino J, Ishak A, Okubanjo T, Michota F, Hylek E, et al. Comparative effectiveness of venous thromboembolism prophylaxis options for the patient undergoing total hip and knee replacement: a network meta-analysis. J ThrombHaemost. 2017; 15:284–294.
- [6]. Rose DK, Bar B. Direct oral anticoagulant agents: pharmacologic profile, indications, coagulation monitoring, and reversal agents. J Stroke Cerebrovasc Dis. 2018; 27:2049–2058.
- [7]. Zhu J, Alexander GC, Nazarian S, Segal JB, Wu AW. Trends and variation in oral anticoagulant choice in patients with atrial fibrillation, 2010–2017. Pharmacotherapy. 2018; 38:907–920
- [8]. Prescribing information. Pradaxa (dabigatranetaxilate). Ridgefield, CT: BoehringerIngelheim Pharmaceuticals, Inc.; 2018.

