Drug-drug interactions with non-vitamin K oral anticoagulants in the management of cancer-associated thrombosis

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Abstract

Abstract Drug-drug interactions (DDIs) are common in cancer management and complicate the choice of anticoagulation in cancer-associated thrombosis. Cancer patients incur an increased risk of thrombotic events. Also, more bleeding events are observed in those who receive anticoagulation compared to those without cancer. In the treatment of cancer-associated thrombosis, non-vitamin K oral anticoagulants (NOACs) are at least as effective as low-molecular weight heparins, which became the standard of care after several trials demonstrated superiority over vitamin K antagonists. Non-inferiority has been shown for rivaroxaban, edoxaban and apixaban with a signal of fewer recurrent thrombotic events, albeit with an increase in bleeding events. Yet, potentially major drug-drug interactions have been identified as a reason to withhold NOACs and to rather choose an alternative. Furthermore, practical guidance on what constitutes a major interaction and/or how to deal with these interactions in clinical practice is limited. Hence, here we have provided a framework to allow clinicians to better deal with drug-drug interactions between NOACs and cancer therapies in the management of cancer-associated thrombosis. In this review we have discussed the current literature, how the pharmacokinetic profile links to the label information on DDI, and have provided a practical proposal, applied to a clinical case. Key words: drug-drug interactions, anticoagulation, non-vitamin K oral anticoagulants, cancer, cancer associated thrombosis

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