Drug–drug interactions (DDIs) in patients using anticancer drugs are common. These DDIs may have serious consequences for either the toxicity or efficacy of treatment [1, 2].

Over the past decade, one of the most promising groups of anticancer drugs are the oral tyrosine kinase inhibitors (TKIs). Although the oral route of administration with these agents is convenient, it also brings many new challenges. Most notably, as TKIs are administered orally on a chronic basis and as they are predominately metabolized by cytochrome P450 (CYP) enzymes, cancer patients on TKI therapy are at considerable risk for DDIs [3].

Although patients on TKI therapy are substantially at risk for DDIs, there is a general lack of up-to-date guidelines on the assessment and management of clinically relevant DDIs associated with TKI therapy in the literature. In addition, with the increasing number of kinase inhibitors being approved, there is a further need for heightened awareness of DDI among health care professionals, especially for such drugs that are administered on a quite long-term, chronic, basis [3, 4]. We thus developed a comprehensive overview providing information on the management of kinase inhibitor-associated DDI, which can be found on the OncologyPRO website in collaboration with the European Society for Medical Oncology (ESMO): http://oncologypro.esmo.org/Guidelines-Practice/Drug-Drug-Interactions-with-Kinase-Inhibitors.

The educational objectives of this website are: first, to aid understanding of clinically relevant DDI associated with kinase inhibitors; second, to explore the type and mechanism of the interaction, including altered bioavailability due to altered stomach pH, metabolism by cytochrome P450 isoenzymes, and prolongation of the QTc interval; and more importantly, to provide specific recommendations to guide physicians and clinical pharmacists in the management of DDIs during treatment with kinase inhibitors in daily clinical practice. An overview of known literature on this topic is given. The website also includes quick access to specific commonly used kinase inhibitors as well as details on types of drug interactions, including CYP3A4 inhibitors/inducers, QT prolongation and acid reducing agents. We believe this website is a valuable resource to the oncology community and encourage its use by oncologists, (clinical) pharmacists and other health care specialists in daily clinical practice.

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