“Strategies and Methods to Prevent Fluoropyrimidine-Associated Toxicities”

Aims & Scope:
Among those antimetabolite drugs used in cancer chemotherapy, fluoropyrimidines still represent a mainstay for the treatment of colorectal, breast and head and neck neoplasms in combination with newer drugs. As for many other antineoplastic agents, the balance between therapeutic effects and toxicities characterizes 5-fluorouracil and its oral prodrugs, as well as capecitabine. Although toxic effects are less frequently and severely associated with oral prodrugs, the occurrence of adverse reactions impairs the subsequent administration of the drugs, and reduce the expected therapeutic benefit. Those toxicities are mainly directed against those tissues with a rapid turn-over, such as bone marrow, oral and gut mucosa, whereas cardiac and skin toxicities are less frequently experienced by patients. Whatever the toxic effect could be, chemotherapy should be delayed or halted. Therefore, there is the need to prevent those toxic effects by screen patients for their expected individual tolerability according to predictive markers. In order to achieve that goal, several studies have been addressed to the study of fluoropyrimidine pharmacokinetics and pharmacogenetics, together with the investigation of new strategies, such as test doses. Finally, in some cases different approaches have been combined together to increase the reliability of the screening tests.

Therefore, the aim of the present special issue will be to offer a view of phenotypization procedures offered in clinical settings to stratify patients according to their individual risk of severe or life-threatening toxicities after fluoropyrimidine administration. Furthermore, additional articles will deal with general and particular issues of those agents, as well as pharmacokineticis and pharmacogenetics. It is worth noting that all of the Authors invited to contribute to the present special issue have a personal experience in the this field.

Subtopics:
Upfront DPD Deficiency Detection to Secure 5-FU Administration: Part 1 –Where Do We Stand?
Upfront Dpd Deficiency Detection to Secure 5-Fu Administration: Part 2- Application To Head-And-Neck Cancer Patients
Fluoropyrimidine-associated toxicities in colorectal cancer patients: the epigenetic point of view

Pharmacokinetic Markers of 5-Fluorouracil Toxicity in Clinical Trials and Real World

Dermatological, cardiovascular and neurological morpho-histopathological effects of fluoropyrimidine-based chemotherapy in humans

Schedule:

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