

Pharmacovigilance in Oncology : Adverse Drug Reaction Linked with Chemotherapy

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Abstract: *Chemotherapy is one of the most effective treatment modalities in cancer management; however, it is frequently accompanied by a wide range of adverse drug reactions (ADRs) that can significantly affect patient safety, treatment adherence, and overall quality of life. Pharmacovigilance is critical in identifying, analysing, and preventing these adverse drug reactions to ensure the safe and effective use of anticancer medicines. The purpose of this study is to summarise the present landscape of oncology pharmacovigilance, with a focus on chemotherapy-related adverse drug reactions (ADRs), reporting procedures, and the issues associated with monitoring and managing drug-induced toxicities. Haematological toxicities, gastrointestinal disturbances, neurotoxicity, and cardiotoxicity are among the most commonly reported ADRs, with variations depending on the drug type and patient characteristics. Despite worldwide pharmacovigilance activities, underreporting remains a significant challenge, particularly in low- and middle-income countries. The combination of real-world data, electronic medical histories, and patient-reported outcomes, along with emerging technologies such as artificial intelligence, provides new prospects for proactive ADR monitoring and signal analysis.*

Keywords: Chemotherapy, Pharmacovigilance, Adverse Drug Reactions, Oncology, Drug Safety, Signal Detection

