

Pediatric Oncology Pharmacy

Tiene Bauters,

Pharmacy, Pediatric Hematology, Oncology and Stem Cell Transplantation, Ghent University Hospital, Ghent, Belgium

Children are not just small adults. From a pharmacological point of view, pediatrics embraces a heterogenic group of patients under the age of eighteen. Pharmacokinetic processes undergo changes during growth and development, while pharmacodynamics vary substantially within the different age groups and disease states, posing some unique pharmacological and pharmaceutical challenges.

Children with cancer often have polymedication, making them particularly at risk for medication errors, drug-related problems and drug-drug interactions between chemotherapy drugs themselves and chemotherapeutics with supportive therapy. Pediatric oncology pharmacists must be trained to ensure safe, effective and rational drug use to optimize the drug treatment.

In the presentation, the role of the pediatric oncology pharmacist as a member of the multidisciplinary team is presented: the advices or recommendations that are given on dosages, use of supportive care drugs, therapeutic drug monitoring as well as the role in compounding chemotherapeutics and other drugs. In addition, the involvement in development and implementation of supportive care guidelines, wherever pharmaceutical expertise is required, is presented.

Finally, the involvement of pediatric oncology pharmacists in different professional organisations and societies is presented.