

"התאמת מינון אישית בהמטואונקולוגיה: חשיבות המעבדה החדשנית"

There is great variability in response to hematooncological therapy among patients, part of which can be accounted for by variability in drug exposure. People differ in the basic pharmacokinetic parameters, clearance and volume of distribution, resulting in 4-fold differences in exposure among patients even when doses are adjusted for body size. Measuring the blood concentration of medications and using advanced pharmacokinetic modeling allows estimating medication exposure with the maximal precision and accuracy, and thus personalization of dosing regimen to the individual patient. In addition, drug concentrations or drug effects can be affected by genetic variants in metabolizing enzymes, drug transporters, or drug target molecules. In these cases, genotype-guided dosing can help optimizing efficacy and reducing toxicity. Thus, the modern pharmacological laboratory needs to provide a range of analytic and pharmacogenetic assays to allow personalized medicine in hematooncology.