The bioanalysis of drugs and related substances has always been a specialization, which deals with rather complex samples. Bioanalysis is described as the analysis of drugs, metabolites and/or endogenous substances in biological fluids. Such methods involve estimation of pharmaceuticals from blood, plasma, urine, blood spots etc. During the development of new drugs, extensive studies are needed at the preclinical and clinical stages. Virtually all aspects of a new drug are to be investigated such as the toxicological and the therapeutic concentrations of drugs and metabolites, Pharmacokinetic studies, optimization studies of the formulations etc. Number of bioanalytical methods by use of HPLC, HPTLC, MS, NMR, Ligand binding assays, etc are continuously developed and published in scientific literature. With the advancement in technology hyphenated techniques were introduced. The proposed work gives a comprehensive review of the bioanalytical methods, associated challenges and possible solutions.

Biography
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