



International Conference & Exhibition on Analytical and Bioanalytical Techniques 2010

ANALBIOANAL - 2010

Pharmaceutical R & D Summit

doi:10.4172/2155-9872.1000073

Analytical Methods for Determination of some Selected Drugs in Pharmaceutical Formulations by HPLC

V. Jayathirtha Rao

Organic Chemistry Division II, Indian Institute of Chemical Technology, Hyderabad, India

Human health is most important for any country. Throughout the world spending percentage for keeping the good health of people is huge. Drug (medicine) discovery as well as its development is complex and highly competitive processes that are defined as the series of specialized events performed to satisfy quality criteria. In the development of the drugs (medicines), several steps are taken to assess their effectiveness on the particular disease with minimal side effects due to the main drug and no harmful effects due to the impurities present in the drug. It becomes very obvious to analyze the purity of the drug and impurities present in the drug. To understand these aspects, analysis of drugs in bulk and in formulations becomes essential. To analyze the drugs in formulations, one should have a proper method in which the drug is properly separated, identified and quantified. Time to time new methods need to be developed and validated to analyse these drug species in the bulk and formulation. To this end, High Performance Liquid Chromatography (HPLC) is the most important analytical technique in the pharmaceutical industry to test the products for both qualitative and quantitative analysis. HPLC methods are relatively standard and used to test the raw material, bulk drugs and formulations. Here we describe a simple, sensitive, reproducible and rapid HPLC methods developed and validated for some selected drugs: Ritonavir, Atomoxetine, Repaglinide, Valacyclovir and Glimipiride in pharmaceutical formulations.