OBJECTIVES

Research in pharmaceutical treatments for illnesses and disease processes has rapidly grown in the past decade. The field is fueled by advances in our understanding of the molecular mechanics of the human body, coupled with the development of sophisticated scientific instruments which can efficiently generate massive amounts of important data. This has led to an ever-growing need for the development of quantitative Bioanalytical methods to measure pharmaceutical compounds.

The proposed study deals with the development and design of bioanalytical method development to measure some of pharmaceutical compounds such as rimonabant, surinabant and anti-cancer agents like Quinacrine and Triapine using hyphenated chromatographic techniques like LC-MS/MS, UPLC-MS/MS etc.

Rimonabant, a cannabinoid antagonist, is an anti-obesity drug.
Surinabant, a cannabinoid antagonist, has potential for treatment of smoking cessation activity.
Quinacrine and Triapine show anti cancer activities.

Not much analytical work is reported for the above mentioned molecules. Hence these molecules are ideal candidates for pursue of bioanalytical development from research as well as pharmaceutical industry point of view.
The basic aim of this proposed research work is to develop bioanalytical method for newer pharmaceutical compounds like rimonabant, surinabant as no reported literature suggests a suitable method developed for the compounds.

Since bioanalytical methods for quantification of drugs is unique, the development of bioanalytical methods for above compounds will help academically and in industry for analysis of biological samples of these drugs.