OBJECTIVE OF THE PRESENT WORK:

The aim of this study is to carry out the phenotyping of the CYP Enzyme CYP2D6 in healthy volunteers in Maharashtra region using the drug Venlafaxine as probe. The study aims at categorizing the population into poor, extensive or ultra extensive metabolizers of the mentioned drugs. Such phenotyping data should be obtained for all individuals in order to prescribe an approximate dose based on their individual metabolic rate. Such phenotyping cards if issued to individuals of the population will help medical sciences in prevention of therapeutic failures as well as occurrence of adverse drug reactions due to inappropriate dosing of the routinely prescribed drugs. Thus, we can say that it would be an immense help to medical and therapeutic sciences to have prospective access to genetic information that might predict efficacy and/or toxicity of an individual for respective drugs.

- To study the phenotyping status of Maharashtra population by using Venlafaxine drug as probe.
- To evaluate the status of CYP 2D6 Enzyme of Maharashtra population.
- To develop and validate the analytical method for estimation of Venlafaxine and its metabolite in human plasma