The present study envisaged to prepare and evaluate S(N)EDDS of BCS class II drugs (Efavirenz, Atorvastatin Calcium and Rosuvastatin Calcium)

**Objectives of the study**

1. To select the suitable drug candidates.
2. To select suitable oil, surfactants and co surfactants for the preparation of SNEDDS.
3. To evaluate the prepared SNEDDS for thermodynamic stability study, dispersion test, effect of pH, robustness to dilution, globule size, zeta potential, viscosity, refractive index, percent transmittance, drug content estimation and drug release studies.
4. To convert optimized liquid SNEDDS to solid form using suitable adsorbents.
5. To prepare SNEDDS loaded tablets by using design of experiments.
6. To evaluate the prepared tablets.
7. To perform *in vitro* and *in vivo* studies.
8. To carryout stability studies for the optimized formulations.
The following drugs are selected for study

Rationale of selecting drugs is that, selected drugs belong to the BCS class II, which have solubility issues which affect the bioavailability. So attempt has been made to enhance the solubility of the selected drugs and improve their bioavailability.

- **Efavirenz**: Efavirez (EFZ) is a first choice Non-nucleoside Reverse Transcriptase Inhibitor used in the infection by the Human Immunodeficiency Virus. EFZ is practically insoluble in water. It shows low oral absorption and bioavailability (40-45%) and high inter-subject variability.  

- **Atorvastatin Calcium**: It is used in the treatment of hyperlipidaemias. Atorvastatin calcium is very slightly soluble in distilled water, pH 7.4, phosphate buffer and acetonitrile, slightly soluble in ethanol, and freely soluble in methanol. The oral Bioavailability is approximately 14%. 

- **Rosuvastatin Calcium**: It is used in the treatment of hyperlipidaemias. Rosuvastatin calcium has low solubility in water and slightly soluble in ethanol. The oral bioavailability is approximately 20%. 