CHAPTER 4

AIM AND OBJECTIVE

The aim of the current research work is to formulate fast dissolving tablets comprising solid dispersions to enhance the aqueous solubility of poorly soluble drugs such as nisoldipine and amolodipine besylate by solid dispersion technology and to avoid the dosage form related factors (formulation factors such as solubility, disintegration, dissolution) by the utilization of fast dissolving technology.

The general aim of the study was focused on increasing the dissolution rate of poorly soluble drugs nisoldipine and amloidipine besylate by formulating them into fast dissolving tablets.

Objectives:

i. Preparation of solid dispersions utilizing nisoldipine and amlodipine besylate as drugs, poloxamer 407 and poloxamer 188 as carrier by solvent evaporation technique.

ii. Characterization of prepared solid dispersions by Infrared Spectral analysis, XRD, DSC, and SEM.

iii. To evaluate the solid dispersions by dissolution studies.

iv. To choose the best solid dispersions.

v. Formulation of the selected solid dispersions into fast dissolving tablets utilizing super disintegrants.

vi. To evaluate the fast dissolving tablets.

vii. Selection of best tablet formulation based on the dissolution studies.

viii. To perform the stability studies for the selected tablets.