Work plan & Methodology:

1) Literature survey.
2) Procurement and identification of curcumin.
3) Preformulation studies of curcumin.
4) Preparation of solid dispersion of curcumin:
   • To prepare solid dispersions (SD) of curcumin by various methods like physical, solvent evaporation and hot melt method.
   • To evaluate solid dispersion by solubility, in vitro release, TLC, FTIR, SEM, and X-Ray diffraction study.
5) Formulation of different PDDS (Capsule and Tablets).
6) Evaluation of different PDDS (Capsule and Tablets).
   • Thickness
   • Weight variation
   • Hardness
   • Friability
   • Drug content
   • In-vitro drug release studies
   • Erosion study
7) In vivo study of the optimized formulation by LC-MS/MS method.
8) Stability study of the optimized formulation by ICH Guide line.