CHAPTER 8

CONCLUSION AND RECOMMENDATION

In the present research work, the aceclofenac sodium and dexibuprofen oral sustained release products such as microbeads, matrix tablets have been developed and investigated the potential utility of polymeric materials such as sodium alginate, locust bean gum, HPMC, natural clay, Kollidon SR to inhibiting the release of drug in the gastric environment. Based on the investigated results, it was concluded that formulated sustained release products namely microbeads and matrix tablets are capable of exhibiting the sustained release properties, environmentally stable and feasible for further scale up industrial production. Further, conclude that the HPMC, sodium alginate and natural clay has the best release retardants. They are capable of reducing the dose intake, minimize the release of drug in the gastric reason and ultimately reduce the dose related adverse effects to improve the therapeutic management of pain and inflammation.

The present research work adopting the new techniques to developing the oral sustained release formulations of aceclofenac sodium and dexibuprofen. Further, recommended to investigate the critical manufacturing variables by using pilot plant scale-up techniques and involving their suitability for long time application, shelf-life stability, *invitro-invivo* correlation (IVIVC), determination of bioavailability and clinical investigations be necessary to improve the therapeutic efficacy and patient compliance.