Modified Evaporative Precipitation into Aqueous Solution Process to Prepare Mfenamic Acid Nanoparticle Compositions

Ikuumasa Ohno, Stephanie Bosseimann, and Robert O. Williams III

Department of Pharmacy, College of Pharmacy, University of Texas at Austin, Austin, TX 78723-2022

Formulation Technology Research Laboratories, Daiichi-Sankyo Company Limited, Kanagawa, Japan

Introduction

- Mfenamic acid sodium (MA) is a selective cyclooxygenase-2 inhibitor that is used to treat various inflammatory and pain conditions
- Several Menafoam products are available for topical administration
- A new method for preparing MA nanoparticles using an evaporative precipitation technique

Objective

- To develop and evaluate rapidly dispersing nano-composite compositions of Mfenamic acid with salvia root extract for the reduction of pain and inflammation

Materials and Methods

- Reference... (Details about the experiments and methods used)
- Results...

Results

- Effect of solvent interactions among MA, water, and salvia root extract on the particle size distribution
- Effect of solvent interactions on the particle size distribution
- Effect of solvent interactions on the morphology of the drug

Discussion

- Surface activity of the drug
- Zeta potential of the drug

Conclusion

- Rapid release and bioavailability of the drug
- Improved therapeutic effects

References

- References are cited here

Acknowledgements

- Acknowledgements are provided here

Graphs and diagrams are included to illustrate the experimental results.