Chapter 3

Aims and Objectives

The numerous toxic side reactions arising out of nonspecific uptake of the drug by normal cells complicate successful chemotherapy of cancer. The primary aim of the present thesis is to establish a modality of delivering drugs which would ensure:

1. Increased intracellular availability of the drug in the cancer cells.
2. Restricted availability of the drug to the normal cells.
3. Therapeutic activity at relatively low plasma levels compared to the conventional mode of use of the drug.

This approach, if successful, may be helpful in combating histiocytic malignancies, in which cells of macrophage lineage turn malignant. It may also be possible to specifically activate the antitumor activity of macrophage by delivering immunomodulators exploiting this approach. Moreover, this approach is entirely general in nature and could also be applicable to the chemotherapy of other diseases which are associated with macrophages.