Chapter 4 Aim and Objective

4 Aim and objective

4.1 Aim

Design, optimization, characterization, and evaluation of Memantine-loaded PLGA self-assembled nanoscaffolds for prolonged action in Alzheimer's disease.

4.2 Objectives

Following objectives were set to achieve the above-mentioned aim:

- 1. Development of Memantine-loaded PLGA self-assembled nanoscaffolds for the treatment of Alzheimer's disease.
- 2. Preparation of PEG-coated self-assembled nanostructures (PEG-MEM-PLGA) SANs for the penetration and delivery of drugs across the BBB for prolonged action in Alzheimer's disease.
- 3. Evaluation and validation of possible mechanism of paracellular transport of nanostructures to brain along with the neuroregeneration potential of SANs.

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