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(57) Abstract:

The present disclosure relates generally to pharmaceuticals. More specifically, the disclosure is directed to a formulation comprising nano-structured lipid carrier particles with a core comprising of a) a solid lipid; b) a liquid lipid; c) berberine or its pharmaceutically acceptable salts; d) a cationic component and e) an emulsifying agent; wherein the core has a coating comprising zinc. The disclosure further relates to methods of preparation of said formulations. The formulation enhances bioavailability and gives a controlled release profile of insoluble berberine in the physiological environment.

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