

ORIGINAL RESEARCH



## TARGETED SOLID LIPID NANOPARTICLES: A NOVEL APPROACH AGAINST MALARIA

Akash Saini\*, Pritee Gupta

Department of Pharmaceutical Sciences, Dr. H. S. Gour Central University, Sagar, Madhya Pradesh, India

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### ABSTRACT:

Malaria is the most prevalent parasitic disease in the world with approximately 250 million clinical episodes annually to global health. In 2015, there were roughly 214 million malaria cases and an estimated 4,38,000 malaria deaths. About 3.2 billion people, which are nearly half of the world's population, are at risk of malaria. The disease also causes a high economic burden, mainly affecting developing countries. In the current study, a targeted drug delivery system was developed using solid lipid nanoparticles loaded with artemether to target infected erythrocytes infected by malaria parasite and having characteristics of prolonged circulation time in blood and controlled release for increasing efficacy and effectiveness of antimalarial therapy and overcoming certain limitations of conventional drug delivery systems and further characterization was done.

**KEYWORDS:** Malaria, Antimalarial therapy, Targeted drug delivery, Controlled release

Corresponding Author: Akash Saini,  
E-mail address: [akashsainipgsagar@gmail.com](mailto:akashsainipgsagar@gmail.com)

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