Development of a Topical Nanoliposomal Formulation of Amphotericin B (SinaAmpholeish) for the Treatment of Cutaneous Leishmaniosis: Preclinical and Human Clinical Results

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Cutaneous leishmaniasis (CL) is a parasitic disease caused by different species of *Leishmania* parasites. CL causes skin lesions on exposed parts of the body. Although CL is not a life-threatening disease, it causes a serious social stigma with life-long disfiguring scars. Conventional treatment of CL still depends on using pentavalent antimonial which requires multiple injections and is not tolerated by most of the patients. Moreover, antimonial therapy is associated with liver, kidney, cardiac and other severe side effects and is not always effective. In addition, resistance to pentavalent antimonial has been reported. In this presentation development of a topical nano-liposomal Amphotericin B (AmB) for the treatment of CL will be presented. The presentation includes the results of preclinical and human clinical (phase I, II, III) studies. The topical nano-liposomal AmB with the tradename of SinaAmpholeish® has been approved by Iranian FDO, and now, it is used for the treatment of CL.