

(12) PATENT APPLICATION PUBLICATION		(21) Application No.202411105042 A	
(19) INDIA			
(22) Date of filing of Application :31/12/2024		(43) Publication Date : 10/01/2025	
(54) Title of the invention : TREATMENT FOR DIABETIC FOOT ULCERS USING NANOSTRUCTURED LIPID CARRIERS AND RELATED METHODS			
<div>(51) International classification :A61P0017020000, A61L0027540000, A61P0003100000, A61K0009140000, A61L0027180000</div> <div>(86) International Application No :NA</div> <div>Filing Date :NA</div> <div>(87) International Publication No :NA</div> <div>(61) Patent of Addition to Application Number :NA</div> <div>Filing Date :NA</div> <div>(62) Divisional to Application Number :NA</div> <div>Filing Date :NA</div>		<div>(71)Name of Applicant :</div> <div>1)Chitkara University</div> <div>Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----</div> <div>2)Chitkara Innovation Incubator Foundation</div> <div>Name of Applicant : NA</div> <div>Address of Applicant : NA</div> <div>(72)Name of Inventor :</div> <div>1)Vaishali Thakur</div> <div>Address of Applicant :Chitkara college of pharmacy, Chitkara university, Chandigarh- Patiala National Highway (NH- 64) Village Jansla, Rajpura Punjab 140401 Rajpura -----</div> <div>2)Dr. Ankit Awasthi</div> <div>Address of Applicant :Chitkara college of pharmacy, Chitkara university, Chandigarh- Patiala National Highway (NH- 64) Village Jansla, Rajpura Punjab 140401 Rajpura -----</div> <div>3)Dr. Sonia Dhiman</div> <div>Address of Applicant :Chitkara college of pharmacy, Chitkara university, Chandigarh- Patiala National Highway (NH- 64) Village Jansla, Rajpura Punjab 140401 Rajpura -----</div> <div>4)Dr. Rohit Bhatia</div> <div>Address of Applicant :Chitkara college of pharmacy, Chitkara university, Chandigarh- Patiala National Highway (NH- 64) Village Jansla, Rajpura Punjab 140401 Rajpura -----</div> <div>5)Dr. Thakur Gurjeet Singh</div> <div>Address of Applicant :Chitkara college of pharmacy, Chitkara university, Chandigarh- Patiala National Highway (NH- 64) Village Jansla, Rajpura Punjab 140401 Rajpura -----</div>	
<div>(57) Abstract :</div> <div>A system for treating diabetic foot ulcers is described, featuring multifunctional scaffolds that incorporate drug-loaded nanostructured lipid carriers (NLCs). These NLCs, containing both synthetic and herbal drugs, enhance the bioavailability and stability of therapeutic agents while providing controlled and sustained drug release. The scaffolds create a moist and antimicrobial environment to promote tissue regeneration and minimize infection risks. Additionally, the system includes oral probiotics to support systemic health by maintaining gut health, boosting the immune system, reducing inflammation, and aiding wound healing. The scaffolds are biocompatible, biodegradable, and designed to conform to the shape of the ulcer, ensuring minimal adverse reactions and effective treatment. Reference Fig 1</div>			
No. of Pages : 15 No. of Claims : 10			