

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :25/11/2024

(21) Application No.202411091531 A

(43) Publication Date : 13/12/2024

(54) Title of the invention : NANOPARTICLE-ENHANCED THERAPEUTIC GEL FOR MOUTH ULCER TREATMENT AND RELATED METHODS

(51) International classification :A61K0009000000, A61K0047320000, A61K0009060000, A61K0031167000, A61K0009700000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Pallavi Bassi

Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Dr. Thakur Gurjeet Singh

Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

3)Sneha Garg

Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

4)Yatish Sharma

Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :

A mucoadhesive gel formulation has been developed for the treatment of mouth ulcers, incorporating curcumin and lidocaine nanoparticles to enhance stability, solubility, and absorption. The formulation includes a mucoadhesive gel with polymers such as Carbopol and chitosan, which deliver the nanoparticles to the ulcer site and prolong their contact time. This dual-action gel reduces inflammation and provides local anesthesia, offering an effective treatment for mouth ulcers. The formulation may also include gelling agents, humectants, preservatives, and a pH adjuster, and is designed for easy application. Reference Fig 1

No. of Pages : 15 No. of Claims : 10