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| <p>(51) International classification :A61K9/127, A61K47/28, A61K47/10, A61K31/495, A61K31/519</p> <p>(86) International Application No :NA<br/>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA<br/>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA<br/>Filing Date :NA</p> |  | <p>(71)Name of Applicant :<br/><b>1)Chitkara University</b><br/>Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----</p> <p><b>2)Chitkara Innovation Incubator Foundation</b><br/>Name of Applicant : NA<br/>Address of Applicant : NA</p> <p>(72)Name of Inventor :<br/><b>1)Dr. Thakur Gurjeet Singh</b><br/>Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----<br/>---</p> <p><b>2)Dr. Chander Parkash</b><br/>Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----<br/>---</p> <p><b>3)Dr. Sonia Dhiman</b><br/>Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----<br/>---</p> |
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(57) Abstract :

The invention relates to an injectable liposomal formulation of Sotorasib designed for intravenous infusion. This formulation includes liposomes encapsulating Sotorasib, with liposome-forming lipids such as phosphatidylcholine, cholesterol, polyethylene glycol-conjugated lipids, and dipalmitoylphosphatidylcholine. The aqueous component consists of a phosphate buffer and sterile water for injection. The liposomal formulation is intended to circulate in the bloodstream and preferentially accumulate in tumor tissues, enhancing Sotorasib concentrations at the tumor site while reducing systemic exposure and potential toxicity. Additionally, the invention encompasses a method for treating KRAS G12C mutated cancers by administering this formulation, which is particularly applicable to non-small cell lung cancer, colorectal cancer, and pancreatic cancer.

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