

成功大學

Covid-19吸入性藥劑團隊

COVID-19 inhale formulation team

奈微體-瑞德西韋吸入劑

NLC-Remd inhale formulation

簡介

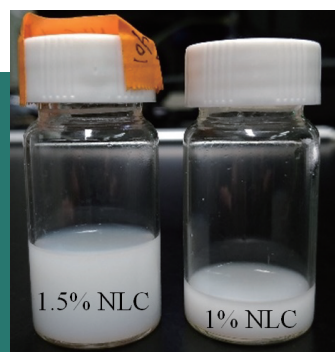
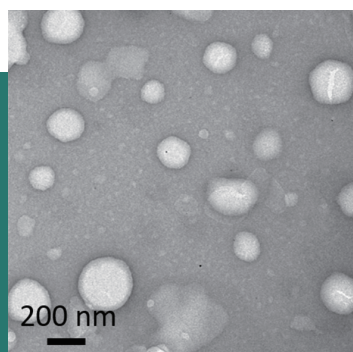
Our product is the development of Nanostructured lipid carriers (NLC) inhale formulation for Remdesivir in COVID-19 treatment. NLC is a lipid/oil in water amorphous carrier, able to carrier hydrophobic drugs (Remdesivir) inside its core for long-term delivery to the lung. NLC have high encapsulation efficiency and loading capacity of drugs, with good physicochemical stability. Its sustained-release characteristics make it applicable for a wide variety of drug delivery routes such as pulmonary drug delivery.

產品項目

奈微體-瑞德西韋吸入劑。
(NLC-Remd inhale formulation)。

發展現況

Our team has now accomplished all in vitro studies which include: 1. NLC-Remd characterization: including morphology, size, and zeta potential, 2. The HPLC assay of remdesivir was finished for in vitro and in vivo studies, 3. The in vitro drug release profile of NLC-Remd is accomplished, 4. The stability of NLC-remdesivir under room temperature for over 3 months. We are now approaching in vivo studies with 2 major animal models: 1. Nose-only exposure chambers model is applied as passive method with in which mice was mildly sedated and breathe in the developed formulation in a confined chamber, 2. Direct intratracheal instillation (MicroSprayer® Aerosolizer), which directly injects the developed aerosolized formulation into the lung. We have accomplished the setup of direct intratracheal instillation. NLC marked with trypan blue is directly spread into lung. No server toxicity or safety issues were found. After lung tissue section, NLC formulation was found spreading over the lung.



公司成立時間：N/A

實收資本額：N/A

專利保護狀況：目前無擁有任何專利，但已申請或是進行授權中。

團隊人數：4

辦公室位置：臺南市

公司網址：N/A