Fabrication of sheet nanoemulgel for treating open surface wounds for subjects presenting delayed wound healing and pressure sores



Principal Investigator
Dr. Priyanka Srivastava
Assistant Professor (Sr.)
Centre for Nanobiotechnology (CNBT)



Co-Principal Investigator
Dr. Raunak Kumar Das
Associate Professor
Centre for Biomaterials, Cellular and
Molecular Theranostics (CBCMT)

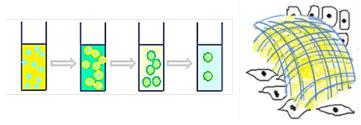
Name of the Funding Agency
Department of Biotechnology (DBT)

Name of the Scheme Medical Devices (Phase I)

Sanctioned Amount (in Rupees)
Rs. 11,00,000

Duration of the Project (years)

Graphical Abstract/Lavout



Project Description

Open surface wounds can be a reason of serious concern in patients presenting delayed wound healing due to variety of adverse body conditions and infection.

Several ointments, liquid disinfectants, antibiotics are available commercially for open wounds. However, limitations arise in aggravated conditions as stated above. Another associated issue in countries like India is outreach of these specialized products to rural population due to cost, mobility and lack of stringent storage conditions in these areas. With newer wound care materials and dressings entering in world market, the options have widened, but according to market surveys, there is still a need of all-in-one product that satisfies the criteria of broad range performance, cost effectiveness and simple storage conditions. Basic idea of this work is to facilitate a cost effective, first-aid nanoemulgel that will require a simple storage condition, is effective on a wide range of open wounds, thereby catering to the the needs of common population suffering from delayed wound healing.