

SS INSTITUTE OF PHARMACY

(A unit of VS Educational & Charitable Trust)

Approved by Tamilnadu Government & Pharmacy Council of India, New Delhi.

Affiliated to the Tamilnadu Dr. M.G.R. Medical University,
and The Directorate of Medical Education, Chennai.

Date: 16.07.2021

To

The Project Lead, IMIS Pharmaceuticals Pvt Ltd, Corporate Office, Chennai, Tamil Nadu.

Dear Sir/Madam,

Sub: Request for Financial Support and Guidance for R&D Work in Funded Project – Reg

This letter is to bring to your kind notice that we (SS Institute of Pharmacy, Salem) are involving our staff and students in research-oriented activities. In this regard, we kindly request your support and permission to undertake a consultancy-related project titled "Enhancement of Aceclofenac Dissolution Rate through Solid Dispersion Technique Utilizing Various Carriers" in association with your esteemed organization. This collaboration will enrich our knowledge and foster the development of innovative ideas with social relevance.

Investigator: Mr. T. Sampath Kumar, AP / SSIP

Thanking You,

PRINCIPAL,
SS INSTITUTE OF PHARMACY,
KUPPANUR (PO), SANKARI (TK),
SALEM -637301.

NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

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CIN: U24239AP1981PTC003079 Telephone: +91 866 4609214 Email: info@imispharma.com



To

Mr. Sampath Kumar Assistant Professor, SS Institute of Pharmacy, Sankari, Salem.

Dear Sir.

Subject: Acceptance and Provision of Financial Assistance for Funded Project – Reg.

We are pleased to inform you that the proposal submitted for the project titled "Enhancement of Acelofenac Dissolution Rate through Solid Dispersion Technique Utilizing Various Carrier" has been approved by our organization for possible funding of Rs. 1,30,000/-, as the project appears to be innovative. We kindly request the Principal Investigator to submit the monthly report.

Project title	Principal Investigator	Project duration
Enhancement of Acelofenac Dissolution Rate through Solid Dispersion Technique Utilizing Various Carrier	Mr.T.Sampath Kumar	1.5 Years

Thanking you,

The Project Lead,

IMIS Pharmaceuticals Pvt Ltd,

Corporate Office,

Chennai,

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ABSTRACT

Enhancement of Acelofenac Dissolution Rate through Solid Dispersion Technique Utilizing Various Carrier

research focuses on enhancing the dissolution rate of Aceclofenac, a non-steroidal antiinflammatory drug (NSAID), through the use of solid dispersion techniques. Aceclofenac is
widely used for its anti-inflammatory and analgesic properties, but its poor aqueous solubility
limits its bioavailability and therapeutic efficacy. The objective of this study is to improve the
dissolution rate and bioavailability of Aceclofenac by employing different carriers in the
formulation of solid dispersions. The carriers explored include hydrophilic polymers such as
polyethylene glycol (PEG), polyvinylpyrrolidone (PVP), and hydroxypropyl methylcellulose
(HPMC), which enhance the solubility of the drug by forming a molecular dispersion. The solid
dispersions are prepared using the solvent evaporation method, and the resulting formulations are
characterized for their physical properties, drug content, and dissolution rate. In vitro dissolution
studies are conducted to compare the release profile of Aceclofenac from the solid dispersion
with that of the pure drug and conventional formulations. The expected outcome is a significant
enhancement in the dissolution rate, leading to improved bioavailability and faster onset of
therapeutic action. This research contributes to the development of more effective and efficient
drug delivery systems for poorly soluble drugs like Aceclofenac.

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