



# 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 : 23.09.2021

To

The Research and Development Head,  
Pulse Pharmaceuticals Pvt Ltd,  
Hyderabad,  
Telangana.

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 "Formulation of Phytosomes Loaded with Alcoholic Extract of *Cardiospermum halicacabum*–Soya Lecithin Phospholipid Complex for Enhanced Drug Delivery" In association with your esteemed organization. This collaboration will enrich our knowledge and foster the development of innovative ideas with social relevance.

**Investigator:** Dr.C. Jothimanivannan/ Principal SSIP

Thanking You ,



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

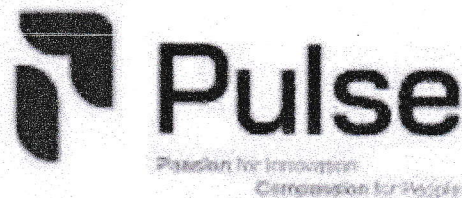
**Address:** Plot No. 18/1, Sector-III, HUDA Techno Enclave,  
HITEC City, Hyderabad, Telangana 500081

**CIN NO:** U24239TG1997PTC026151

**REG NO:** 026151

**Contact:** 04027007049

**Email:** info@pulsepharma.net



To

Dr. C.Jothimanivannan,  
SS Institute of Pharmacy,  
Sankari, Salem.

Dear Sir

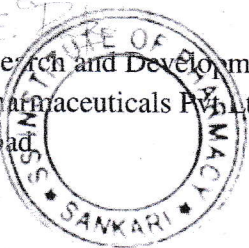
**Subject:** Acceptance and Provision of Financial Assistance for Funded Project – Reg.


We are pleased to inform you that the proposal submitted for the project titled "Formulation of Phytosomes Loaded with Alcoholic Extract of Cardiospermumhalicacabum–Soya Lecithin Phospholipid Complex for Enhanced Drug Delivery" has been approved by our organization for possible funding of Rs. 1,75,000 as the project appears to be innovative. We kindly request the Principal Investigator to submit the monthly report.

Project title	Principal Investigator	Project duration
Formulation of Phytosomes Loaded with Alcoholic Extract of Cardiospermumhalicacabum– Soya Lecithin Phospholipid Complex for Enhanced Drug Delivery	Dr.C Jothimanivannan	2 Years

Thanking you,

The Research and Development Head,  
Pulse Pharmaceuticals Pvt.Ltd,  
Hyderabad.



  
**PRINCIPAL,**  
SS INSTITUTE OF PHARMACY,  
KUPPANUR (PO), SANKARI (TK),  
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## ABSTRACT

### **Formulation of Phytosomes Loaded with Alcoholic Extract of Cardiospermumhalicacabum–Soya Lecithin Phospholipid Complex for Enhanced Drug Delivery**

This research focuses on the formulation of phytosomes loaded with the alcoholic extract of cardiospermumhalicacabum, commonly known as balloon vine, combined with a soya lecithin phospholipid complex to enhance drug delivery. Phytosomes are a novel drug delivery system that improves the bioavailability of plant-based compounds by forming a complex with phospholipids, thereby enhancing their absorption and therapeutic efficacy. Cardiospermumhalicacabum is known for its anti-inflammatory and analgesic properties, making it a promising candidate for use in pain relief and inflammatory disorders. The formulation involves extracting the active phytoconstituents from cardiospermumhalicacabum and complexing them with soya lecithin to form phytosomes, which are then incorporated into a suitable dosage form. The phytosome formulation is evaluated for its particle size, zeta potential, and encapsulation efficiency, as well as its stability and in vitro release profile. The goal of this study is to demonstrate that the phytosome complex can improve the solubility, absorption, and bioavailability of the herbal extract, leading to enhanced therapeutic outcomes. This research provides a foundation for developing more effective plant-based drugs that can be used in modern medicine.



*[Signature]*  
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