

REVIEWER'S REPORT

Manuscript No.: IJAR-52999

Title: A Review on Ethosomes: A Novel Approach to Enhancing Transdermal Drug Delivery

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance			✓	

Reviewer Name: Dr Aamina

Reviewer's Comment for Publication.

The manuscript titled "*A Review on Ethosomes: A Novel Approach to Enhancing Transdermal Drug Delivery*" provides a detailed and informative overview of ethosomal drug delivery systems, emphasizing their significance in overcoming the limitations posed by the stratum corneum in transdermal applications. The abstract clearly identifies the key challenge—low drug permeability through the skin—and positions ethosomes as a promising solution to this problem. The description of ethosomes as phospholipid-based elastic nanovesicles containing a high concentration of ethanol offers a concise characterization of their structure and mechanism of action.

The abstract further highlights the comparative advantages of ethosomal systems over traditional liposomes and ethanol-based formulations, specifically in terms of drug penetration depth and quantity. The language used successfully conveys the potential of ethosomes in advancing bioactive molecule delivery through both skin and cellular barriers, setting the stage for a discussion that spans both opportunity and complexity in future therapy development.

The introduction contextualizes the topic by reaffirming the benefits and challenges of transdermal drug delivery. It provides a clear explanation of the role of the skin as both an attractive and obstructive route for drug administration. The discussion on the limited efficacy of traditional enhancement techniques—such as iontophoresis, electroporation, and microneedles—is comprehensive and points to the need for alternative strategies.

The historical development of elastic vesicular systems, including the work of Cevc in 1992, is well incorporated and underscores the evolution of the field. The introduction does well to explain why conventional lipid-based carriers such as liposomes and niosomes are insufficient, thus justifying the exploration of novel carriers like ethosomes.

Overall, the manuscript is informative, well-structured, and addresses a relevant topic in pharmaceutical sciences. It demonstrates a good balance between foundational knowledge and recent advancements in

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

the field of transdermal drug delivery, making it a valuable resource for researchers and practitioners interested in nanocarrier systems.