

Web of Science

Search

Search Results

My Tools ▾

Search History

Marked List

 [Look Up Full Text](#)


Save to EndNote online ▾

Add to Marked List

1 of 1

Pharmacokinetic and Pharmacodynamic Features of Nanoemulsion Following Oral, Intravenous, Topical and Nasal Route

By: Choudhury, H (Choudhury, Hira)^[1]; Gorain, B (Gorain, Bapi)^[2]; Chatterjee, B (Chatterjee, Bappaditya)^[3]; Mandal, UK (Mandal, Uttam K.)^[3]; Sengupta, P (Sengupta, Pinaki)^[3]; Tekade, RK (Tekade, Rakesh K.)^[1,4]

[View ResearcherID and ORCID](#)

CURRENT PHARMACEUTICAL DESIGN

Volume: 23 Issue: 17 Pages: 2504-2531

DOI: 10.2174/1381612822666161201143600

Published: 2017

[View Journal Impact](#)

Abstract

Background: Most of the active pharmaceutical ingredients discovered recently in pharmaceutical field exhibits poor aqueous solubility that pose major problem in their oral administration. The oral administration of these drugs gets further complicated due to their short bioavailability, inconsistent absorption and inter/intra subject variability.

Methods: Pharmaceutical emulsion holds a significant place as a primary choice of oral drug delivery system for lipophilic drugs used in pediatric and geriatric patients. Pharmacokinetic studies on nanoemulsion mediated drugs delivery approach indicates practical feasibility in regards to their clinical translation and commercialization.

Results: This review article is to provide an updated understanding on pharmacokinetic and pharmacodynamic features of nanoemulsion delivered via oral, intravenous, topical and nasal route.

Conclusion: The article is of huge interest to formulation scientists working on range of lipophilic drug molecules intended to be administered through oral, intravenous, topical and nasal routes for vivid medical benefits.

Keywords

Author Keywords: Hydrophobicity; oral delivery; pharmacokinetics; pharmacodynamics; routes of administration; carbon nanotubes

KeyWords Plus: DRUG-DELIVERY SYSTEM; IN-VIVO EVALUATION; WATER-SOLUBLE DRUGS; BIOPHARMACEUTICS CLASSIFICATION-SYSTEM; TRANSDERMAL DELIVERY; BIOAVAILABILITY ENHANCEMENT; INTRANASAL DELIVERY; LIPID NANOEMULSION; FORMULATION DESIGN; ANTITUMOR-ACTIVITY

Author Information

Reprint Address: Tekade, RK (reprint author)

Natl Inst Pharmaceut Educ & Res NIPER Ahmedabad, Dept Pharmaceut, Opposite Air Force Stn Palaj Basan Rd, Gandhinagar 382355, Gujarat, India.

Reprint Address: Choudhury, H (reprint author)

 Int Med Univ, Dept Pharmaceut Technol, Kuala Lumpur 57000, Malaysia.

Addresses:

Citation Network

1 Times Cited

198 Cited References

[View Related Records](#)

 [Create Citation Alert](#)

(data from Web of Science Core Collection)

All Times Cited Counts

1 in All Databases

1 in Web of Science Core Collection

1 in BIOSIS Citation Index

0 in Chinese Science Citation Database

0 in Data Citation Index

0 in Russian Science Citation Index

0 in SciELO Citation Index

Usage Count

Last 180 Days: 3

Since 2013: 3

[Learn more](#)

Most Recent Citation

Choudhury, Hira. [Recent advances in TPGS-based nanoparticles of docetaxel for improved chemotherapy](#). INTERNATIONAL JOURNAL OF PHARMACEUTICS, AUG 30 2017.

[View All](#)

This record is from:

Web of Science Core Collection
- Science Citation Index Expanded

Suggest a correction

If you would like to improve the quality of the data in this record, please [suggest a correction](#).

- + [1] Int Med Univ, Sch Pharm, Dept Pharmaceut Technol, Jalan Jalil Perkasa 19, Kuala Lumpur 57000, Malaysia
- + [2] Lincoln Univ Coll, Fac Pharm, Kuala Lumpur, Malaysia
- + [3] Int Islamic Univ Malaysia, Kulliyah Pharm, Pahang, Malaysia
- [4] Natl Inst Pharmaceut Educ & Res NIPER Ahmedabad, Dept Pharmaceut, Opposite Air Force Stn Palaj Basan Rd, Gandhinagar 382355, Gujarat, India

E-mail Addresses: HiraChoudhury@imu.edu.my; rakeshtekade@gmail.com

Funding

Funding Agency	Grant Number
Science and Engineering Research Board, Department of Science and Technology, Government of India	
NIPER-Ahmedabad	
Fundamental Research Grant (FRGS) scheme of Ministry of Higher Education, Malaysia	

[View funding text](#)

Publisher

BENTHAM SCIENCE PUBL LTD, EXECUTIVE STE Y-2, PO BOX 7917, SAIF ZONE, 1200 BR SHARJAH, U ARAB EMIRATES

Categories / Classification

Research Areas: Pharmacology & Pharmacy

Web of Science Categories: Pharmacology & Pharmacy

Document Information

Document Type: Review

Language: English

Accession Number: WOS:000405530500011

PubMed ID: 27908273

ISSN: 1381-6128

eISSN: 1873-4286

Journal Information

Impact Factor: [Journal Citation Reports](#)

Other Information

IDS Number: FA6CI

Cited References in Web of Science Core Collection: 198

Times Cited in Web of Science Core Collection: 1