IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 2, September 2024

A Concise Summary of Transdermal Patches

MsVaishnavi Dhondiram Naikwade¹, MsAnkita Arjun Giramkar², Priti Amar Nagargoje³, Prathamesh N Bansode⁴, Ms Rutuja N Raut⁵. Student, Department of Pharmaceutical Science¹ Assistant Professor, Department of Pharmaceutical Science^{2,3,4,5} Saikrupa Institute of Pharmacy, Ghargaon, Ahmednagar, Maharashtra, India

Abstract: Transdermal patches offer a method of drug delivery that does not require penetration of the skinIt is a patch with adhesive properties that releases a controlled amount of medication into the bloodstream via the skinTransdermal drug delivery offers numerous benefits when compared to alternative methods of administrationIt is less invasive, more patient-friendly, and can the harsh acidic condition of the stomach that drugs are exposed to when taken orallyTransdermal patches have been a focus of interest and have been utilized for many years to administer medication like nicotine, fentanyl, nitroglycerin, and clonidine for the treatment of different illnesses or ailmentsFor millennia, human societies have used various substances on the skin for cosmetic and medicinal purposesNevertheless, it wasn't until the 20th century that the skin started being utilized as a means of delivering drugsAccording to Merriam Webster, the fact is that the dates are The term "transdermal" was introduced in 1944, signifying its novelty in medical and pharmaceutical fieldsTransdermal medications come in self contained, distinct dosage formDelivering drugs through the skin to produce a systemic impact without causing any variations in the drug's plasma levelsAdministering therapeutic agents topically provides numerous benefits compared to traditional oral and invasive drug delivery techniquesFurthermore, it allows for the controlled release of the medication for a prolonged period of timeThis review article briefly outlines the benefits and skin routes for transdermal drug deliverytransdermal drug delivery systems (TDDS), different parts of transdermal patch, and methods for creating transdermal patches Assessment of transdermal systems, overall clinical factors in the use of TDDS, and restrictions of TDDS

Keywords: Transdermal, Permeation pathways, Drug delivery, Matrix, Reservoir

