

# Formulation and Evaluation Transdermal Patch of Aqueous Extract of *Azadirachta indica* A. Juss using Different Polymers

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**Abstract:** *The goal of the Novel Drug Delivery System is to deliver a therapeutic dose of drug to an appropriate place within the body quickly so that the desired drug concentration can be maintained. Over a set treatment period, the drug-delivery system should supply the medicine at a rate controlled by the body's requirements. A transdermal patch is a medicated adhesive patch that is applied to the skin to deliver a specific amount of medication into the bloodstream through the skin. This generally aids in the recovery of a damaged bodily part. The patch provides a controlled release of medication into the patient, usually through a porous membrane covering a reservoir of medication or through thermoregulation melting thin layers of drug incorporated in the adhesive, which is a benefit of transdermal drug delivery over other types of medication delivery such as oral, topical, intravenous, intramuscular, and so on. As a result of persistent experimentation with nature, man must have known the therapeutic potential of neem since past. When used both internally and externally, it is beneficial to the skin. It cleanses the blood and treats acne, pimples, boils, and other skin problems. The flavour of neem is bitter. However, it is this bitterness that is responsible for the tree's therapeutic efficiency. Transdermal patches are presently available in a wide range of therapeutics.*

**Keywords:** NDDS, Transdermal Patch, Neem, Infrared Spectroscopy

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