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(57) Abstract :
The present invention describes a nanosuspension formulation of azathioprine designed for transdermal delivery. The formulation includes azathioprine, sodium lauryl sulfate (SLS), and water, achieving a zeta potential of approximately -31.8 mV and a particle size of about 431.6 nm. Additionally, a transdermal patch is detailed, comprising a backing layer, an adhesive layer, and the nanosuspension formulation. Methods for preparing the nanosuspension and the transdermal patch are also provided, involving processes such as high-pressure homogenization and optional sonication. The formulation and patch are characterized by specific quantities of components, ensuring effective delivery of azathioprine through the skin. Reference Fig 1

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