

# NETWORK PHARMACOLOGY BASED ASSESSMENT ON *GUDUCHI* (*TINOSPORA CORDIFOLIA*) IN THE MANAGEMENT OF PSORIASIS

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## ABSTRACT

Psoriasis is a chronic inflammatory disease that significantly affects individuals and places a considerable burden on healthcare systems globally. This study employs network pharmacology to elucidate the herb *Guduchi's* protein interactions in modulating psoriasis pathogenesis. Bioactive compounds of *Tinospora cordifolia* were gathered from multiple research journals. PubChem CID-associated phytochemical was evaluated for drug likeness according to Lipinski's "rule of 5" using the Swiss ADME database and the target genes were predicted from BindingDB. Pathway analysis was done through KEGG and network was framed using Cytoscape 3.7.2. The key phytochemicals identified include menisperine, DL-tetrahydropalmatine, methyl linoleate, tembetarine and linoleic acid, and target proteins ADRB1, ADRB2, ADRB3, DRD1, and HTR6 are involved in regulating neuroactive ligand-receptor interaction, calcium signaling pathway, serotonergic synapse, cGMP-PKG and cAMP signaling pathway etc., which exhibit a major role in psoriasis pathogenesis. From these interactions, it can be inferred that *Guduchi* significantly influences the regulation of psoriasis pathogenesis.