Indian Journal of Traditional Knowledge
Vol 25(1), January 2026, pp 7-16
DOI: 10.56042/ijtk.v25i1.18228

Scope and challenges of network pharmacology in Ayurveda research elucidated towards modelling the efficacy of *Osmium tenuiflorum* (Tulsi) for virus-induced influenza

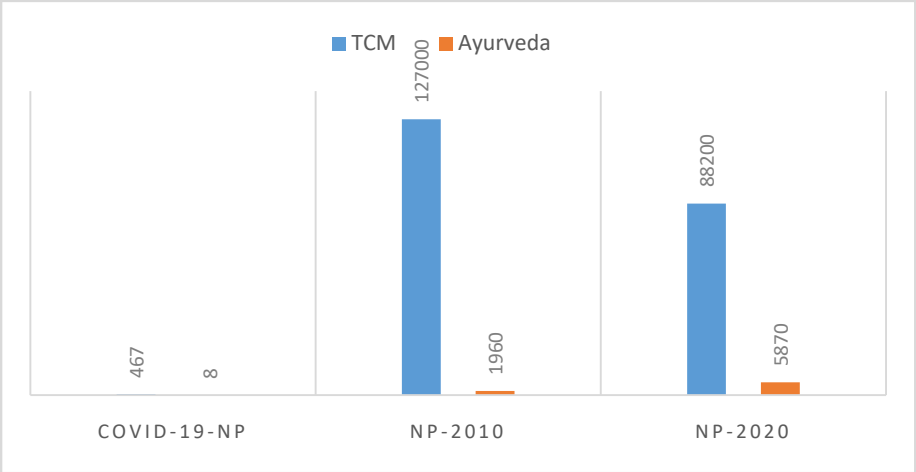
Komal Tilwani & Gayatri Dave*
P D Patel Institute of Applied Sciences, CHARUSAT, Changa 388 421, Anand, Gujarat, India
*E-mail: gayatridave.bt@charusat.ac.in

Received 25 March 2025; revised 09 December 2025; accepted 07 January 2026

Supplementary Data

Supplementary Table S1 — Functional enrichment analysis for targets

Network type	Network topology	Targets obtained	Scope of network	Fig. No
Compounds (10)-Compound targets (100)	95 nodes, 99 edges	MAOA, CASP3, and TP53 are common across various compounds, including Apigenin, Eugenol, Linalool, Oleanolic acid, and Carvacrol.	*Provides a view on the degree of interactions for compounds and associated targets	5a
Compound target(100)-diseases target(4482)	10 nodes, 6 edges	These 6 hub targets (tumour protein p53 (TP53), caspase 3 (CASP3), caspase 8 (CAP8), interleukin 2(IL2), transthyretin (TTR) & cystic fibrosis transmembrane conductance regulator (CFTR) were common to Ursolic acid, rosamaric acid, linalool, apigenin	*Facilitates the visualisations of the interaction of compound targets and disease targets, giving a clear idea about compounds and disease target interaction	5b
Compound (4)- disease targets(6)- other interacting cellular proteins (30)	40 nodes, 280 edges	Five proteins were clustered and hence considered as closely related: TP53, CASP8, AKT1, CFTR, IL2	*Investigates the other similar interacting proteins	5c
Compound (4)-target (36)-biological pathways	40 nodes, 71 edges	81 KEGG pathways, 159 biological processes, 21 cellular components- 31 were enriched, 10 most significant are presented in the network	*The target information obtained through the above networks can be used in finding the biological role of these targets and thereby for associated compounds	5d



Supplementary Fig. S1 — Exhibits the usage of network pharmacology tools in TIM and TCM. Published research was obtained through the keywords “Network Pharmacology (NP), Ayurveda or traditional Indian medicine, network pharmacology, traditional Chinese medicine, and Covid-19. The entries were manually verified, and the filters were adjusted for reports published in 2000-2010 and 2010-2020, presented as NP-2010 and NP-2020, respectively. Covid-19-NP represents the application of NP in Covid-19 research in the discipline under investigation