

Omics-based databases, web servers, or software frequently used in bioinformatics approaches to identify prospective target genes from natural compounds and plant-derived or traditional Chinese medicines (TCMs), as well as their impact on enhancing the effectiveness of conventional drugs when used in combination in the treatment of breast cancer across several subtypes.

Single natural compound or natural product derived from plant or traditional Chinese medicines	Breast cancer subtypes	Omics-based databases, web servers or software					References
		Data Mining	GO and KEGG pathway enrichment analysis	PPI network and hub gene selection	Genetic Alteration	Survival analysis	
CKI	-	NCBI GEO	DAVID	STRING	-	GEPIA	(19,46)
		SuperPred		Cytoscape			
		Swiss Target Prediction					
		TCMSP					
		Therapeutic Target Database					
		STITCH					
		TCGA					
		PharmMapper					
		Swiss Target Prediction					
		DisGeNET					
		GeneCards					
Anhydroicaritin	-	TCMSP	DAVID	STRING	-	Breast Cancer Gene-Expression Miner version 4.7r	(42)

		Swiss Target Prediction		Cytoscape			
		PubChem					
		BioCrick					
		TargetMol					
		GeneCards					
Xihuang Pill	-	BATMAN-TCM	BATMAN-TCM		-	-	(136)
		GeneCards					
		OMIM					
		PharmGkb					
		Therapeutic Target Database					
		Drug Bank					
Tangeretin and tamoxifen	-	Swiss Target Prediction	WebGestalt	STRING	cBioPortal	Kaplan–Meier Plotter	(93,94)
		NCBI GEO		Cytoscape			
Tangeretin	-	PubChem	WebGestalt	STRING	cBioPortal	-	(94)
		PubChem		Cytoscape			
Borneol and tamoxifen	Luminal A	NCBI GEO	DAVID	STRING	cBioPortal	-	(22)
				Cytoscape			
Schisandrin	-	Swiss Target Prediction	DAVID	STRING			(39)
		PharmMapper		Cytoscape			
		GeneCards					
		Drug Bank					
Hesperetin	-	STITCH	DAVID	STRING	cBioPortal	-	(96,117)
		STRING	WebGestalt	Cytoscape			
		DTP					
		PubChem					

Honokiol and Trastuzumab	HER2+	PubChem	WebGestalt	STRING	cBioPortal	Kaplan–Meier Plotter	(48)
		TargetNet		Cytoscape			
		Swiss Target Prediction					
		SEA					
		BindingDB					
		DisGeNet					
Borneol and Trastuzumab	-	Swiss Target Prediction	WebGestalt	STRING	cBioPortal	Kaplan–Meier Plotter	(95)
		TargetNet		Cytoscape			
		PubChem					
		BindingDB					
		SEA					
		DisGeNET					
		OMIM					
		GeneCards					
Honokiol	-	STITCH	WebGestalt	STRING	cBioPortal	GEPIA	(9)
		Swiss Target Prediction	DAVID	Cytoscape			
		canSAR Black					
		SEA					
		NCBI GEO					
Honokiol and tamoxifen	-	NCBI GEO	DAVID	GeneMANIA	cBioPortal	Kaplan–Meier Plotter	(10)
Curcumin	TNBC	NCBI GEO	GEN ONTOLOGY DATABASE	STRING	-	-	(28)
			KEGG DATABASE	Cytoscape			

Epigallocatechin gallate (EGCG), Epicatechin (EC), Epigallocatechin (EGC), and Epicatechin gallate (ECG)	TNBC	Pubchem	ShinyGO	STRING		-	(101)
		Comparative Toxicogenomics Database		Cytoscape			
		DisGeNET					
		GeneCards					
Brazilin	HER2+	STITCH	WebGestalt	STRING	cBioPortal	-	(123,137)
		DTP		Cytoscape			
		PubChem					
Cinnamaldehyde	-	NCBI GEO	WebGestalt	STRING	cBioPortal	-	(138)
				Cytoscape			
Dihydrocapsaicin (DHC)	TNBC	TCMSP	Metascape	STRING	cBioPortal	-	(139)
		BATMAN-TCM		Cytoscape			
		HERB					
		Genecards					
		OMIM					
		Therapeutic Target Database					
		Drug Bank					
		DisGeNET					
<i>Cremastra appendiculata</i>	-	SwissADME	Metascape	STRING	-	Kaplan–Meier Plotter	(129)
		MalaCards		Cytoscape			
		Swiss Target Prediction					

[10]-Gingerol	TNBC	TCMSP	DAVID	STRING	-	Kaplan–Meier Plotter	(29)
		PubChem		Cytoscape			
		NCBI GEO					
		TCGA					
Oleanolic acid (OA) and Tamoxifen	ER+	NCBI GEO	DAVID	STRING	cBioPortal	-	(88)
				Cytoscape			
Paeoniflorin and Tamoxifen	ER+	NCBI GEO	DAVID	STRING	cBioPortal	Kaplan–Meier Plotter	(89)
				Cytoscape			
Cannabidiol analogs	TNBC	NCBI GEO	-	STRING	-	Kaplan–Meier Plotter	(132)
				Cytoscape		GEPIA	
γ-Mangostin and doxorubicin	TNBC	NCBI GEO	The Harmonizome software	GeneMANIA	-	-	(44)
Hesperidin	Luminal	STITCH	DAVID	STRING	cBioportal	-	(97,140)
		TCMSP	WebGestalt	Cytoscape			
		NCBI GEO					
Trigonelline	-	The Therapeutic Target Database	DAVID	STRING	cBioPortal	-	(141)
		TCGA	Enrichr	Cytoscape			
		GeneCards					
		Comparative Toxicogenomics Database					
Berberine and Tamoxifen	-	NCBI GEO	DAVID	STRING	cBioPortal	-	(23)
				Cytoscape			

Berberine	-	TCMSP	Bioconductor (clusterProfiler)	STRING		Kaplan–Meier Plotter	(142)
		HIT 2.0		Cytoscape			
		STITCH					
		SymMap					
		PharmMapper					
		ChemMapper					
		Swiss Target Prediction					
		ChEMBL					
		UniProt					
		UCSC Xene database					
		GSEA					
Cardiac glycosides from <i>Vernonia amygdalina</i>	HER2+	SEA	DAVID	STRING	cBioPortal	Kaplan–Meier Plotter	(11)
		Swiss Target Prediction		Cytoscape			
		DisGeNET					
		UALCAN		Cytoscape			
Naringenin	-	STITCH	DAVID	STRING	cBioPortal	-	(98)
		Drug Bank	WebGestalt	Cytoscape			
		PubChem					
Eleutheroside E	-	Swiss Target Prediction	DAVID	STRING	-	-	(143)
		TCGA		Cytoscape			
Triterpenoid in <i>Liquidambaris Fructus</i>	-	PharmMapper	ClueGO plug-in Cytoscape	STRING	-	-	(144)

		Therapeutic Target Database	CluePedia	Cytoscape			
Ursolic acid (UA)	TNBC	NCBI GEO	DAVID	STRING	-	GEPIA	(31)
				Cytoscape			
Polysaccharopeptide	TNBC and Luminal	Swiss Target Prediction	-	STRING		-	(145)
		PharmMapper		Cytoscape			
		DisGeNet					
Chelidonine	-	TCGA	Bioconductor (clusterProfiler)	-	-	Kaplan–Meier Plotter	(146)
Withaferin-A		Swiss Target Prediction	DAVID	STRING	-	-	(147)
		DisGeNET		Cytoscape			
		GeneCards					
		OMIM					
Ellipticine	-	DTP	-	STRING	cBioPortal	Kaplan–Meier Plotter	(148)
		PubChem					
<i>Zingiber officinale</i> (Ginger) and <i>Allium sativum</i> (Garlic) extract	-	-	Bioconductor (clusterProfiler)	STRING	-	-	(118)
			KEGG DATABASE	Cytoscape			
Matrine	TNBC	NCBI GEO	DAVID	STRING	-	GEPIA	(32)
				Cytoscape			
Glycyrrhizic Acid	Luminal A	NCBI GEO	DAVID	STRING	cBioPortal	-	(24)
				Cytoscape			
Xiaoyaosan	-	TCGA	Metascape	STRING	-	Kaplan–Meier Plotter	(128)
		DisGeNET		Cytoscape			
		GeneCards					
		TCMSP					

<i>Rhapontici Radix and Cremastrae Pseudobus</i>	-	NCBI GEO	ClueGO plug-in Cytoscape	STRING	-		(149)
		GeneCards		Cytoscape			
		TCMSP					
Oroxyli semen	-	GeneCards	SRplot	STRING	-	-	(150)
		TCMSP		Cytoscape			
<i>Damnacanthus indicus C.F.Gaertn</i>	-	BATMAN-TCM	WebGestalt	STRING	cBioPortal	Kaplan–Meier Plotter	(151)
				Cytoscape			
Qizhu prescription	-	TCMSP	Bioconductor (clusterProfiler)	STRING	-	-	(152)
		TCGA		Cytoscape			
		ArrayExpress					
Tetrandrine	-	IMPPAT	DAVID	STRING	-	-	(153)
		PharMapper		Cytoscape			
		GeneCards					
		OMIM					
		DisGeNET					
<i>Jasminum sambac</i> L. (<i>J. sambac</i>)	TNBC and Luminal	Pubchem	PANTHER	STRING	-	-	(154)
		SwissADME		Cytoscape			
<i>Avicennia marina</i>	-	GreenMolBD	DAVID	STRING	-	-	(155)
		KNAPsACK		Cytoscape			
		IMPPAT					
		STITCH					
		Pubchem					
		GeneCards					
<i>Oldenlandia diffusa</i>	TNBC	TCMSP	GEN ONTOLOGY DATABASE	STRING	-	-	(34)

		TCMID	KEGG DATABASE	Cytoscape			
		BATMAN-TCM					
		NCBI GEO					
Nobiletin	Luminal	-	WebGestalt	STRING	cBioPortal	Kaplan–Meier Plotter	(99)
				Cytoscape			
PGV-1 and Piperine	TNBC	Swiss Target Prediction	-	-	-	OncoLnc	(135)
		UALCAN					
<i>Flos daturae</i>	-	TCMSP	Bioconductor (clusterProfiler)	STRING	GEPIA	-	(25)
		GeneCards		Cytoscape			
		Drug Bank					
		NCBI GEO					
		Terapeutik Target Database					
		PharmGkb					
Xiaoai Jiedu Recipe	Luminal	TCMSP	Bioconductor (clusterProfiler)	STRING	-	-	(156)
		TCGA		Cytoscape			
		GeneCards					
Si-Wu-Tang	Luminal	TCMSP	-	STRING	-	-	(120)
		Pubchem		Cytoscape			
		Swiss Target Prediction					
		TCGA					
Artemisinin and Tamoxifen	Hormone Receptor+ (HR+)	NCBI GEO	Bioconductor (clusterProfiler)	STRING	-	-	(26)
		Cancer Cell Line Encyclopedia	BIOCONDUCTOR (DOSE)	Cytoscape			

		Comparative Toxicogenomics Database	Bioconductor (GSEABase)				
		Swiss Target Prediction	BIOCONDUCTOR (GSVA)				
		BindingDB					
		TargetNet					
		UniProt					
<i>Curcuma longa</i>	TNBC	-	DAVID	STRING	-	-	(157)
				Cytoscape			
Syringin	TNBC and Luminal	Swiss Target Prediction	DAVID	STRING	-	Kaplan–Meier Plotter	(133)
		PharmMapper		Cytoscape		GEPIA	
		GeneCards					
		Drug Bank					
<i>Salvia miltiorrhiza</i> - and Ginseng	TNBC	TCMSP	DAVID	STRING	-	GEPIA	(35)
		SEA		Cytoscape		Kaplan–Meier Plotter	
		Swiss Target Prediction					
		NCBI GEO					
		TCGA					
		European Genome-Phenome Archive					
Quercetin	-	TCMSP	Bioconductor (clusterProfiler)	STRING	cBioPortal	-	(125)
		GeneCards		Cytoscape	TIMER		
		OMIM					
		PharmGkb					
		Therapeutic Target Database					

		Drug Bank					
Lactoferrin	Luminal (MCF-7)	NCBI GEO	SIGNOR	STRING	-	-	(158)
				Cytoscape			
Xiaochaihutang	-	TCMSP	Bioconductor (clusterProfiler)	STRING	-	-	(119)
		TCGA		Cytoscape			
Aporphine Alkaloid	-	Swiss Target Prediction	ShinyGO	STRING	-	-	(100)
		GeneCards		Cytoscape			
		DisGeNET					
Liujunzi Decoction	-	TCMSP	DAVID	STRING	-	-	(159)
		ETCM		Cytoscape			
		BATMAN-TCM					
		NCBI GEO					
		OMIM					
		PharmGkb					
		Terapeutic Target Database					
		Drug Bank					
		GeneCards					
Crataegus monogyna	-	TCMSP	DAVID	STRING	-	-	(160)
		KNApSAck		Cytoscape			
		IMPPAT					
		OMIM					
		GeneCards					
		Swiss Target Prediction					
		STITCH					
		NCBI GEO					

Glycyrrhizin	-	ChEMBL	STRING	STRING	-	-	(161)
		DisGeNET		Cytoscape			
Propolis	-	NCBI GEO	DAVID	STRING		GEPIA	(40)
		STITCH		Cytoscape			
		Swiss Target Prediction					
		SEA					
		TargetNet					
Kahweol	TNBC	TCGA	Metascape	-	-	Kaplan–Meier Plotter	(162)
			DAVID				