

Figure S1. Detailed screening process for active ingredients. Methods to obtain active ingredients and detailed information of GEB using ETCM and TCMSP database, using Vanillin as an example. (A) Search *Gastrodia* in ETCM (tcmpip.cn/ETCM/index.php/Home/). (B) Obtain Vanillin from the active ingredients of GE. (C) Open TCMSP database (tcmsp-e.com/tcmsp.php), select Chemical name and search Vanillin. (D) Select first chemical from list of chemicals similar to Vanillin. (E) Obtain oral bioavailability, drug-likeness (DL) and other details of the active ingredients. ETCM, Encyclopedia of Traditional Chinese Medicine; GEB, *Gastrodia elata* Blume; TCMSP, Traditional Chinese Medicine Systems Pharmacology.

A



B

Chemical Component	Candidate Target genes
Vanillin	ALB(0.8947), AR(0.8571), ESR1(0.8571), ESR2(0.8571), PGR(0.8571), PLA2G1B(0.8), PLA2G2E(0.8)

C



D



E

Molecule Information																									
Molecule ID	MOL000635																								
Molecule name	vanillin																								
Download structure (click to download)																									
Pharmacological and molecular properties data	<table border="1"> <thead> <tr> <th>MW</th> <th>AlogP</th> <th>Hdon</th> <th>Hacc</th> <th>OB (%)</th> <th>Caco-2</th> <th>BBB</th> <th>DL</th> <th>FASA-</th> <th>TPSA</th> <th>RBN</th> <th>HL</th> </tr> </thead> <tbody> <tr> <td>152.16</td> <td>1.31</td> <td>1</td> <td>3</td> <td>52.00</td> <td>0.68</td> <td>0.41</td> <td>0.03</td> <td>0.33</td> <td>46.53</td> <td>2</td> <td>11.79</td> </tr> </tbody> </table>	MW	AlogP	Hdon	Hacc	OB (%)	Caco-2	BBB	DL	FASA-	TPSA	RBN	HL	152.16	1.31	1	3	52.00	0.68	0.41	0.03	0.33	46.53	2	11.79
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InChIKey	MWOOGJBJHARFG-UHFFFAOYSA-N																								

Figure S2. Volcano map of differentially expressed genes. The abscissa \log_2FC represents the difference (ischemic stroke/normal) and the ordinate represents confidence level $[-\log_{10}(P\text{-value})]$. Each point in the figure represents a gene. The dashed lines on the horizontal and vertical axes represent the \log_2FC absolute threshold of 0.5 and P-value threshold of 0.05, respectively. FC, fold change.

