

补肾健脾汤网络药理学分析

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1 摘要

补肾健脾汤网络药理学 (党参 9 g、白术 12 g、茯苓 12 g、甘草 6 g、山药 12 g、泽泻 9 g、地黄 12 g、山茱萸 9 g、牡丹皮 9 g、黄芪 12 g, 补骨脂 9 g, 杜仲 9 g), 绘制药方-草药-主要活性成分-靶点图。

结果见 Fig. 2

2 材料和方法

2.1 方法

Mainly used method:

- Website HERB <http://herb.ac.cn/> used for data source.¹
- Other R packages (eg., `dplyr` and `ggplot2`) used for statistic analysis or data visualization.

3 分析结果

4 结论

5 附：分析流程

5.1 补肾健脾汤网络药理学分析

5.1.1 成分

Table 1 (下方表格) 为表格 Herbs information 概览。

(对应文件为 `Figure+Table/Herbs-information.xlsx`)

注：表格共有 12 行 18 列，以下预览的表格可能省略部分数据；表格含有 12 个唯一‘Herb_’。

Table 1: Herbs information

Herb_	Herb_...	Herb_...	Herb_...	Herb_...	Prope...	Merid...	UsePart	Function	Indic...
HERB0...	BAI ZHU	白术	rhizo...	Rhizo...	Warm;...	Splee...	root	To in...	Splee...
HERB0...	BU GU...	补骨脂	Malay...	Psora...	Extre...	Splee...	fruit	To su...	Fract...
HERB0...	DANG ...	党参	root ...	Radix...	Mild;...	Lung;...	root	To re...	Splee...
HERB0...	DI HUANG	地黄	Radix...	NA	NA	NA	NA	NA	NA
HERB0...	DU ZHONG	杜仲	Eucom...	Corte...	Warm;...	Liver...	bark	To to...	Hyper...
HERB0...	FU LING	茯苓	India...	Poria	Mild;...	Splee...	scler...	To ca...	Neura...
HERB0...	GAN CAO	甘草	Root ...	Radix...	Mild;...	Lung;...	root ...	To re...	1. It...
HERB0...	HUANG QI	黄芪	root ...	Radix...	Warm;...	Lung;...	root	To re...	Commo...
HERB0...	MU DA...	牡丹皮	Tree ...	Corte...	Minor...	Liver...	root ...	To re...	Appen...

Herb_	Herb_...	Herb_...	Herb_...	Herb_...	Prope...	Merid...	UsePart	Function	Indic...
HERB0...	SHAN YAO	山药	Commo...	Rhizo...	Mild;...	Lung;...	rhizome	To re...	Reduc...
HERB0...	SHAN ...	山茱萸	Asiat...	Fruct...	Warm;...	Liver...	fruit	To re...	Dizzi...
HERB0...	ZE XIE	泽泻	rhizo...	Rhizo...	Cold;...	Bladd...	tuber	To ca...	Hyper...

Table 2 (下方表格) 为表格 Components of Herbs 概览。

(对应文件为 [Figure+Table/Components-of-Herbs.xlsx](#))

注: 表格共有 2088 行 4 列, 以下预览的表格可能省略部分数据; 表格含有 1840 个唯一 ‘Ingredient.name’。

Table 2: Components of Herbs

herb_id	Ingre.....2	Ingre.....3	Ingre.....4
HERB0...	HBIN0...	12-(...	12-(...
HERB0...	HBIN0...	12-(...	[(4E,...
HERB0...	HBIN0...	12-Ox...	(5aR,...
HERB0...	HBIN0...	12-se...	NA
HERB0...	HBIN0...	13,15...	13,15...
HERB0...	HBIN0...	14-ac...	NA
HERB0...	HBIN0...	14-ac...	NA
HERB0...	HBIN0...	14(-...	14(-...
HERB0...	HBIN0...	14(-...	14(-...
HERB0...	HBIN0...	(1R)-...	ZINC0...
HERB0...	HBIN0...	(1S,2...	(1R,2...
HERB0...	HBIN0...	2-[(1...	EINEC...
HERB0...	HBIN0...	2-[(2...	2-[(2...
HERB0...	HBIN0...	2alph...	NA
HERB0...	HBIN0...	3 -ac...	NA
...

Figure 1 (下方图) 为图 intersection of all compounds 概览。

(对应文件为 [Figure+Table/intersection-of-all-compounds.pdf](#))

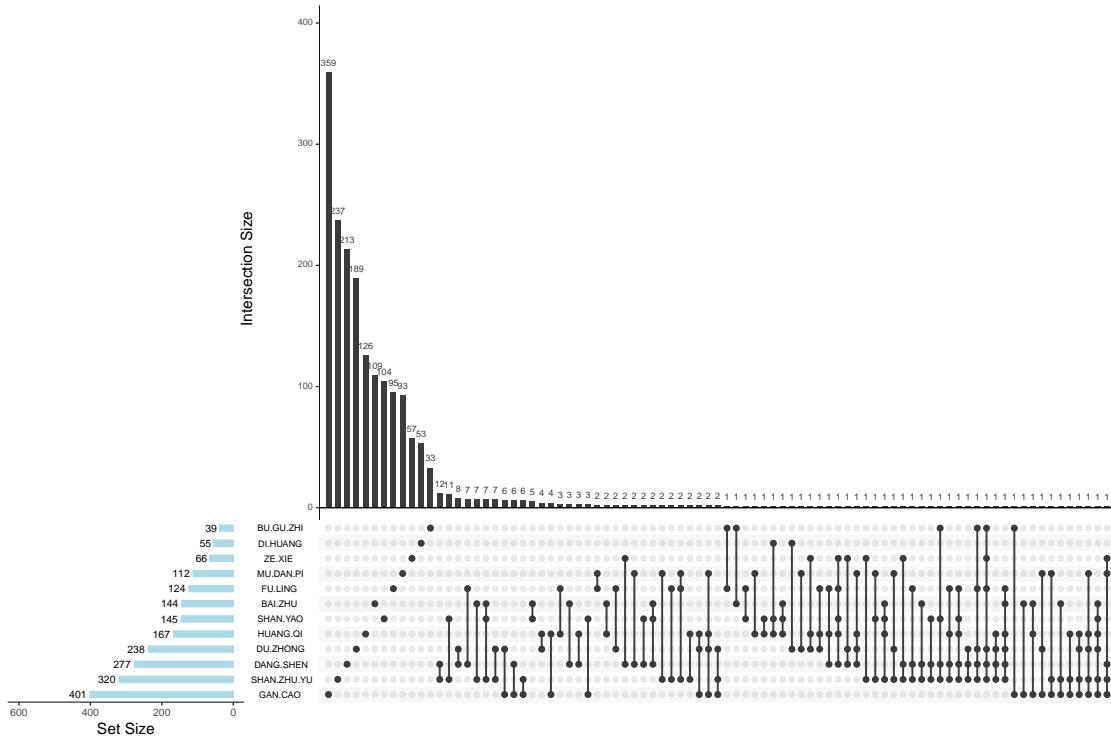


Figure 1: Intersection of all compounds

5.1.2 成分靶点

Table 3 (下方表格) 为表格 tables of Herbs compounds and targets 概览。

(对应文件为 Figure+Table/tables-of-Herbs-compounds-and-targets.xlsx)

注：表格共有 21525 行 9 列，以下预览的表格可能省略部分数据；表格含有 1840 个唯一‘Ingredient.id’。

Table 3: Tables of Herbs compounds and targets

Ingre.....1	Herb_...	Ingre.....3	Ingre.....4	Targe.....5	Targe.....6	Datab...	Paper.id	...
HBIN0...	FU LING	10-hy...	NA	NA	NA	NA	NA	...
HBIN0...	SHAN ...	11,14...	(11E,...	HBTAR...	NCOA2	NA	NA	...
HBIN0...	SHAN ...	11,14...	(11E,...	HBTAR...	ACHE	NA	NA	...
HBIN0...	SHAN ...	11,14...	(11E,...	HBTAR...	PPARG	NA	NA	...
HBIN0...	SHAN ...	11,14...	(11E,...	HBTAR...	CA2	NA	NA	...
HBIN0...	DANG ...	11alp...	11 -m...	NA	NA	NA	NA	...
HBIN0...	SHAN ...	11-Cy...	Henei...	NA	NA	NA	NA	...
HBIN0...	ZE XIE	11-de...	NA	NA	NA	NA	NA	...
HBIN0...	DU ZHONG	11-de...	11-De...	HBTAR...	NR3C1	NA	NA	...
HBIN0...	DU ZHONG	11-de...	11-De...	HBTAR...	AR	NA	NA	...
HBIN0...	GAN CAO	11-de...	11-De...	HBTAR...	NR3C1	NA	NA	...

Ingre.....1	Herb_....	Ingre.....3	Ingre.....4	Targe.....5	Targe.....6	Datab...	Paper.id	...
HBIN0...	GAN CAO	11-de...	11-De...	HBTAR...	AR	NA	NA	...
HBIN0...	DU ZHONG	11-de...	NA	NA	NA	NA	NA	...
HBIN0...	DANG ...	11-Hy...	Spiro...	HBTAR...	CDK2	NA	NA	...
HBIN0...	DANG ...	11-Hy...	Spiro...	HBTAR...	ESR1	NA	NA	...
...

Figure 2 (下方图) 为图 Herbs compounds and targets 概览。

(对应文件为 ./Figure+Table/Herbs-compounds-and-targets.png)

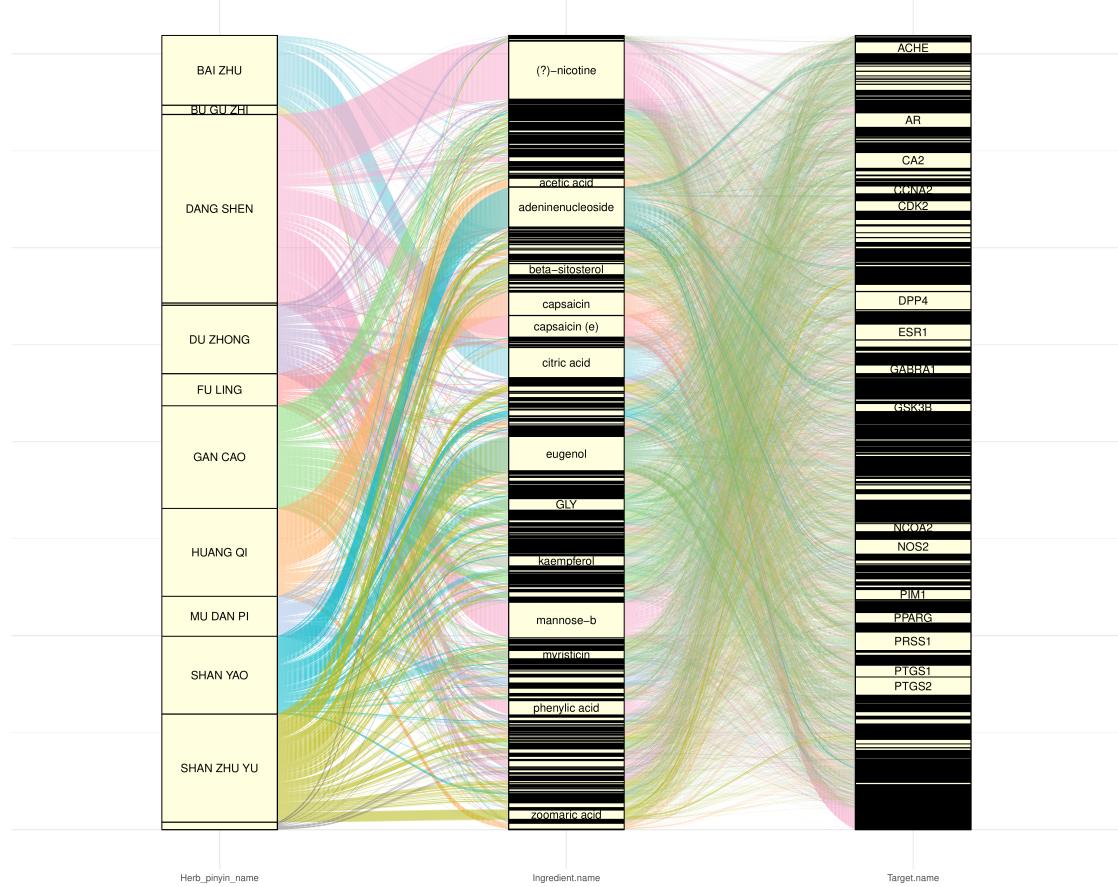


Figure 2: Herbs compounds and targets

Reference

1. Fang, S. et al. HERB: A high-throughput experiment- and reference-guided database of traditional chinese medicine. *Nucleic Acids Research* **49**, D1197–D1206 (2021).