

抗新冠肺炎中药治疗数据库

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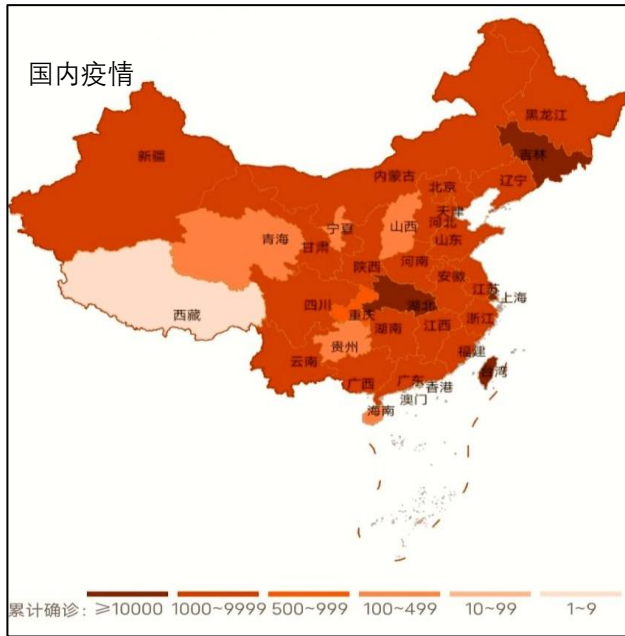


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<https://doi.org/10.1002/imt2.42>

新冠疫情现状

在许多国家，具有高度传染性的 *omicron BA.2* 亚型激增，截至 2022 年 5 月 1 日，全球已报告超过 5 亿例确诊病例和超过 600 万例死亡。



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中医药对新冠的治疗

中医药 (TCM) 已广泛用于 2019 年新型冠状病毒肺炎 (COVID-19) 的预防、治疗和康复, 并在与该疾病的斗争中发挥了作用。



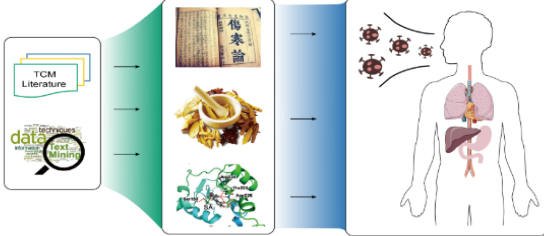
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TCM2COVID数据库

TCM₂COVID

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Anti-COVID-19 effects and mechanisms of TCM



TCM₂COVID documents more than 280 anti-COVID TCM formulas and over 80 NPs that refer to over 300 herbs, all from the literature and public sources. Meanwhile, TCM₂COVID launches a useful webserver for querying, analyzing and visualizing documented formulas similar to those supplied by the user (formula similarity analysis). In summary, TCM₂COVID provides a user-friendly and practical platform for documenting, querying, and browsing anti-COVID TCM treatments and will help in the development and elucidation of the mechanisms of action of new anti-COVID TCM therapies to support the fight against the COVID-19 epidemic.


Formula

Click to browse details



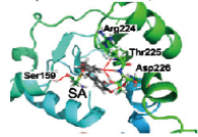
Herb

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Nature Product

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Sister Projects

- CellCall (NAR. 2021)
- cncRNAdb (NAR. 2021)
- Cellinker (Bioinformatics. 2021)
- RIscooper (Bioinformatics. 2019)

About Us

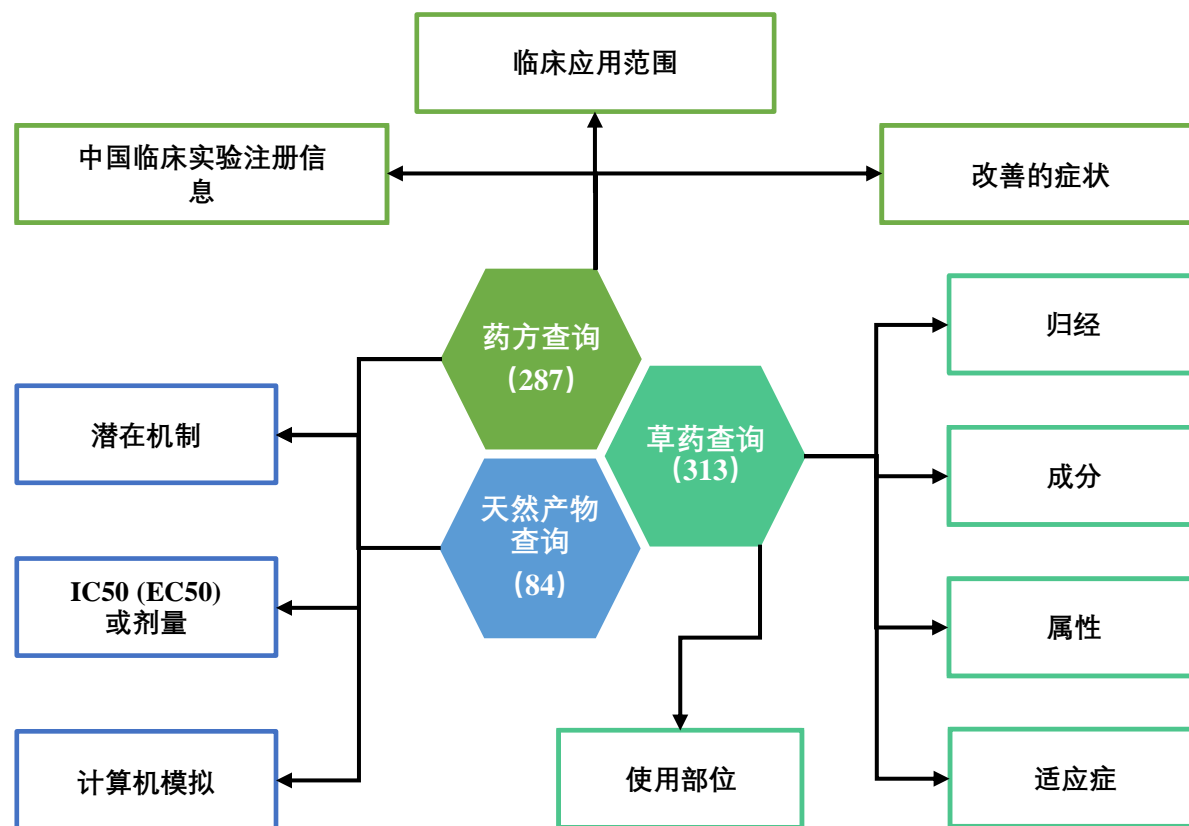
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<http://zhangy-lab.cn/tcm2covid/>

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TCM2COVID数据收集

TCM2COVID 收录了 287种中药方剂（包括 313种草药），提供了详细的临床证据和治疗机制信息，记录了 84种具有详细潜在治疗机制的天然产物。



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TCM2COVID复方相似性分析

Formula similarity analysis



$$FS\ score = \frac{L_q \cap L_i}{L_q \cup L_i}$$

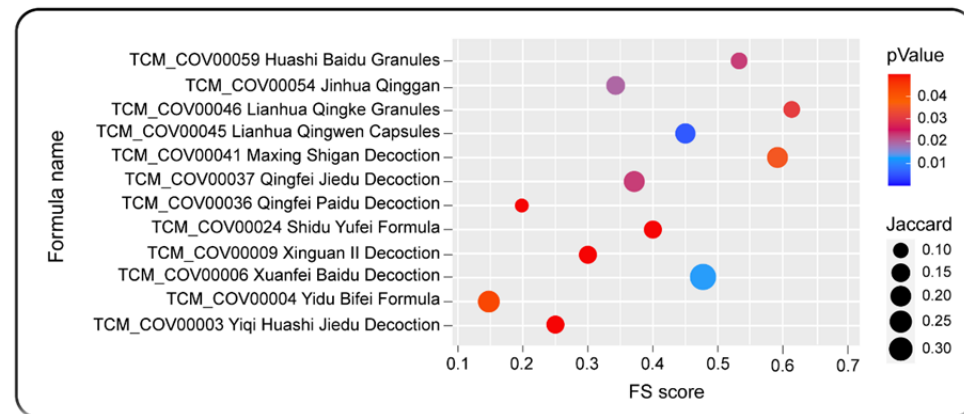
其中 L_q 是查询药方 q 的中草药列表， L_i 是收录药方 i 的草药列表。此外，我们使用 Fisher 精确检验估计了查询药方与收录药方之间相似性的显著性。

Jaccard similarity coefficient

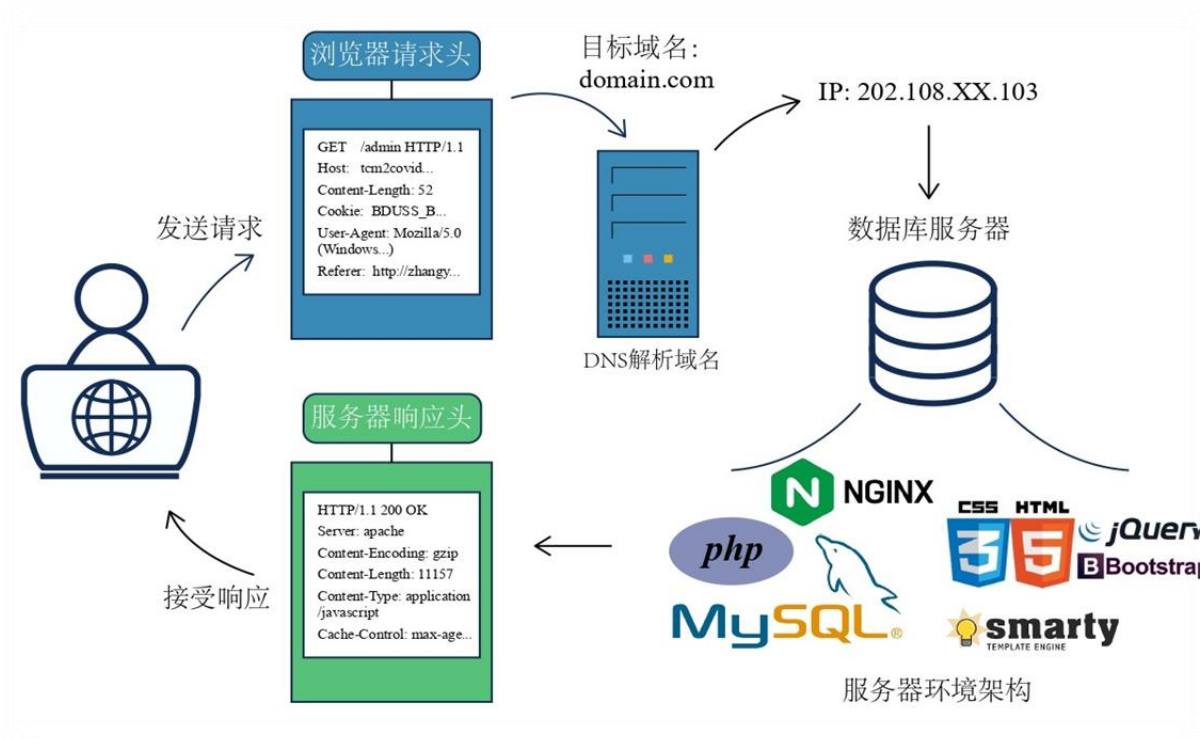
$$FS\ score = \frac{L_q \cap L_i}{L_q \cup L_i}$$

Fisher's exact test

A	B	A+B
C	D	C+D
A+C	B+D	A+B+C+D



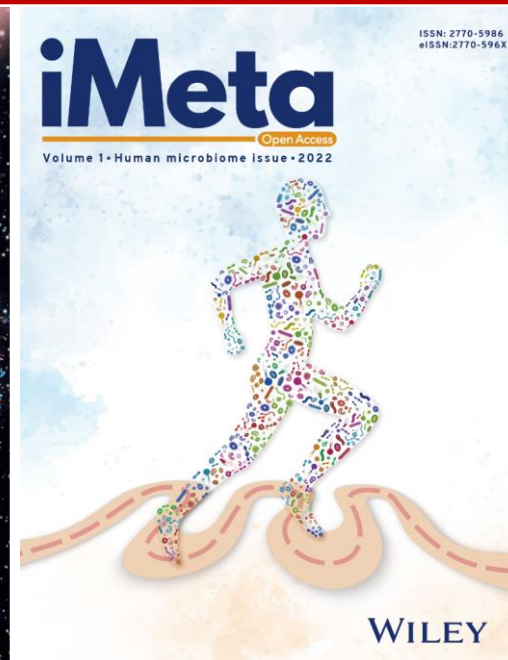
TCM2COVID数据库构建



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总结

综上所述，TCM2COVID收录了280多种中药方剂（包括300多种草药），并提供了方剂相关的详细的临床证据和治疗机制信息；收录了80多种具有详细治疗机制的天然产物数据。总之，该数据库为收录、查询和浏览抗新冠肺炎中医治疗方案提供了一个用户友好且实用的平台，有助于研发新的抗新冠肺炎中医方案及阐明其作用机制。



“iMeta”是由威立、肠菌分会和本领域数百位华人科学家合作出版的开放获取期刊，主编由中科院微生物所刘双江研究员和荷兰格罗宁根大学傅静远教授担任。目的是发表原创研究、方法和综述以促进宏基因组学、微生物组和生物信息学发展。目标是发表前10%(IF > 15)的高影响力论文。期刊特色包括视频投稿、可重复分析、图片打磨、青年编委、前3年免出版费、50万用户的社交媒体宣传等。2022年2月正式创刊发行!



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