INPLASY

Combined bailing capsule and conventional therapies in the treatment of chronic renal failure: A meta-analysis and economic evaluation

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 20 May 2025 and was last updated on 20 May 2025.

INTRODUCTION

Review question / Objective To compare the clinical efficacy of bailing capsules combined with conventional therapies and conventional therapies alone and assessing their economic value from the Chinese healthcare system perspective.

Condition being studied Bailing capsule is currently recommended for improving renal function in chronic renal failure (CRF) in China, whereas there is limited research assess Bailing capsule's clinical benefits in the context of healthcare resource utilization.

METHODS

Search strategy
Search strategy in PubMed:
#1 chronic renal failure [Title/Abstract]
#2 CRF [Title/Abstract]
#3 chronic kidney diseases [Title/Abstract]
#4 CKD [Title/Abstract]
#5 chronic kidney failure [Title/Abstract]
#6 #1 OR #2 OR #3 OR #4 OR #5
#7 corbrin capsule [Title/Abstract]
#8 aweto [Title/Abstract]
#9 artificial aweto preparation [Title/Abstract]
#10 cordyceps sinensis [Title/Abstract]
#11 Chinese caterpillar fungus [Title/Abstract]
#12 Chinese medicine [Title/Abstract]
#13 traditional Chinese medicine [Title/Abstract]
#14 combine traditional Chinese and western medicine [Title/Abstract]
#15 #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14
#16 clinical trial [Filter]
#17 randomized controlled trial [Filter]
#18 #16 OR #17
#19 #6 AND #15 AND #18.

Participant or population Non-dialysis patients with CRF.

Intervention Bailing capsule combined with conventional therapies.

Comparator Conventional therapies alone.

Study designs to be included All studies should have an RCT design.

Eligibility criteria The inclusion criteria were as follows: (1) patients: non-dialysis patients with CRF; (2) Intervention: Bailing capsule combined with conventional therapies; (3) control: conventional therapies alone; (4) outcome: serum creatinine, BUN, creatinine clearance rate (Ccr), and 24-hour urinary protein; and (5) study design: all studies should have an RCT design. Studies were excluded if they met the following criteria: (1) the intervention only illustrated artificial cordyceps but did not mention the bailing capsule; (2) the treatment regimens contained other traditional Chinese medicine; and (3) the baseline characteristics, treatment duration, and investigated outcomes were not reported.

Information sources PubMed, EmBase, Cochrane library, China Science and Technology Journal Database, Wanfang, and China National Knowledge Internet databases.

Main outcome(s) Serum creatinine.

Additional outcome(s) BUN, creatinine clearance rate (Ccr), and 24-hour urinary protein.

Quality assessment / Risk of bias analysis Risk of Bias 2 (ROB2) tool according to the methods described by the Cochrane Collaboration.

Strategy of data synthesis The efficacy of the bailing capsule was assessed from the serum creatinine level, and the pooled effect estimate. Heterogeneity among the included studies was evaluated using I2 and Q statistic. The fixed-effect model was used to calculate the pooled effect estimate when $P > 0.10$, and $I2 < 25\%$, while the random-effects model was applied if $P25\%$.

Subgroup analysis Subgroup analyses were performed to explore potential heterogeneity for serum creatinine level.

Sensitivity analysis Sensitivity analysis was performed to assess the robustness of the pooled conclusion by sequentially removing individual trials.

Country(ies) involved China.

Keywords Chronic renal failure; Bailing capsules; Markov model; cost-effectiveness analysis; Chinese population.

Contributions of each author
Author 1 - Yumei He.
Author 2 - Wei Li.
Author 3 - He Zhu.
Author 4 - Sheng Han.