

INPLASY

Effects and safety of Ginkgo biloba extract on hyperlipidemia: a meta-analysis of randomised controlled trial

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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 7 April 2026 and was last updated on 7 April 2026.

INTRODUCTION

Review question / Objective Previous studies have explored the effect of Ginkgo biloba extract (Gbe) on hyperlipidemia; however, the results were inconclusive. We aimed to assess the efficacy and safety of Gbe on hyperlipidemia.

Condition being studied Patients without hyperlipidemia.

METHODS

Participant or population Pubmed, Wanfang, China National Knowledge Infrastructure (CNKI) were searched until Dec 31, 2024. Mean difference was pooled using random-effects models..

Intervention Receiving Ginkgo biloba extract.

Comparator Receiving no Ginkgo biloba extract.

Study designs to be included Randomised controlled trials.

Eligibility criteria Population: Adults diagnosed with hyperlipidemia. Intervention: Gbe as the only intervention. Comparison: Western medicine, proprietary Chinese medicine. Outcomes: TC, TG, HDL-C, and LDL-C. Study design: Randomised controlled trials.

Information sources PubMed, Wanfang, and China National Knowledge Infrastructure.

Main outcome(s) Total cholesterol (TC), triglyceride (TG), high density lipoprotein (HDL), low density lipoprotein (LDL).

Quality assessment / Risk of bias analysis Additionally, the included RCTs underwent quality assessment using the JADAD scale (5 items) and the Cochrane RoB 2.0 tool. Based on the overall risk of bias determined by both tools, studies were categorized into two tiers: overall low risk of bias

(high quality) and high risk of bias or some concerns (low quality).

Strategy of data synthesis We searched the study from PubMed, Wanfang, and China National Knowledge Infrastructure up to Dec 31, 2024. The following keywords were used when it was conducted: hyperlipidemia, dyslipidemia, hypercholesterolemia, hypertriglyceridemia, TC, triglyceride (TG), high density lipoprotein (HDL-C), LDL-C, ginkgo. We conduct a comprehensive search with no language restrictions. In addition, we also refer to the references list to find more relevant studies, but grey literature, clinical trial registration platforms, or unpublished data have not been retrieved. The literature search was conducted in accordance with PRISMA.

Subgroup analysis In addition to conducting age-stratified analyses, all trials were stratified based on the daily dose of Gbe used into low-dose groups (1.5 g/d).

Sensitivity analysis Sensitivity analysis was explored by deleting one study in turn to observe the impact of individual results on the overall analysis.

Country(ies) involved China.

Keywords Ginkgo biloba extract; hyperlipidemia; meta.

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