Efficacy and safety of Traditional Chinese Medicine for the treatment of acquired immunodeficiency syndrome: a systematic review

Xin Deng, Manjun Jiang, Xiaofang Zhao, Jian Liang

RESULTS: Twelve RCTs involving 881 patients with AIDS were included. Methodological quality assessment showed that two were high-quality, two were moderate-quality, and eight were low-quality. Meta-analysis showed that TCM interventions were associated with significantly reduced plasma viral load compared with placebo [odds ratio OR=2.46, 95% confidence interval CI (1.02, 5.94); P=0.04]. However, the reductions in plasma viral load significantly favored conventional Western medical therapy [OR=0.16, 95% CI (0.05, 0.55); P=0.004]. Patients receiving TCM interventions had significantly higher CD4+ T lymphocyte counts compared with those on placebo [OR=2.54, 95% CI (1.40, 4.60); P=0.002]. In addition, TCM interventions were significantly more likely to have improved clinical symptoms [OR=2.82, 95% CI (1.85, 4.31); P<0.00001]. TCM interventions conferred a similar risk of adverse events (AEs) compared with control interventions [OR=1.87, 95% CI (0.58, 6.01); P=0.29].

CONCLUSION: Current evidence suggests that TCM interventions are significantly more effective than placebo in reducing plasma viral load and increasing CD4+ T lymphocyte count in patients with AIDS. When compared with conventional Western medical therapy, TCM interventions were significantly less effective in reducing plasma viral load, although they were associated with a higher percentage of patients with improved symptoms. Patients receiving TCM interventions did not seem to be at an increased risk of AEs.

Key words: Acquired immunodeficiency syn-
drome; Traditional Chinese Medicine; Safety; Systematic review

INTRODUCTION

Acquired immunodeficiency syndrome (AIDS) is a highly transmissible disease caused by human immunodeficiency virus (HIV). There are approximately 33.3 million people living with HIV infection worldwide. Despite an overall decline, the rate of HIV infection has increased by more than 25% in eastern Europe and central Asia since 2001. HIV infection is most prevalent in sub-Saharan Africa where it accounts for 67% of the global HIV-infected population. By 2010, the number of chronic HIV-infected patients in mainland China has increased to 370 393. AIDS is a life-threatening disease that causes heavy economic burdens and other significant indirect losses. There are no effective vaccines for the prevention of AIDS, but various treatments have been developed. Highly active anti-retroviral therapy (HAART) is the preferred choice for the prevention and treatment of AIDS. HAART has been found to be beneficial for patients with AIDS though it has some limitations. Many asymptomatic HIV-infected patients remain untreated because of current recommendations against the use of antiviral therapy for such patients.

Traditional Chinese Medicine (TCM) can significantly improve symptoms, increase and stabilize immune function and quality of life, and reduce toxicity of antiviral drugs in patients with AIDS. The promising efficacy of TCM in the treatment of AIDS has generated great interest worldwide. However, there is a scarcity of systematic reviews on the efficacy and safety of TCM interventions in AIDS. This article presents a Cochrane systematic review of relevant published randomized controlled trials (RCTs) to provide evidence-based support for the use of TCM in the clinical treatment of AIDS.

DATA AND METHODS

Inclusion criteria

Type of study: full-text RCTs investigating the use of oral TCM for the treatment of AIDS in China and other countries were included, regardless of use of blinding, or the types and languages of publication.

Subjects: study population included patients with AIDS or AIDS-related diseases, regardless of sex, age, race, or ethnicity. A diagnosis of AIDS was made if a test for HIV antibodies was positive and a CD4 + T lymphocyte count was less than 200 cells/µL. Additionally, AIDS was diagnosed if there was an epidemiological history and a positive HIV antibody test with the presence of any one of the following: (a) unexplained irregular fever of 38°C or higher lasting for more than 1 month; (b) diarrhea (more than three defecations per day) for more than 1 month; (c) body mass loss of more than 10% in the past 6 months; (d) recurrent Candida infection; (e) recurrent herpes simplex or zoster infection; (f) pneumocystis carinii pneumonia; (g) recurrent bacterial pneumonia; (h) active tuberculosis or nontuberculous mycobacterial disease; (i) deep fungal infection; (j) central nervous system lesions; (k) dementia in young or middle-aged adults; (l) active cyto-megalovirus infection; (m) toxoplastic encephalitis; (n) penicillium infection; (o) recurrent sepsis; or (p) mucocutaneous or visceral Kaposi’s sarcoma, lymphoma.

Interventions: patients in the experimental group orally received traditional Chinese medical treatment (Chinese herbal compounds) alone or in combination with conventional Western medical treatment. In the control group, patients were treated with conventional Western medical intervention or placebo.

Outcome measures: the primary endpoint was reduction in plasma viral load (HIV-IRNA). The secondary endpoints included increases in CD4 + T lymphocyte count, the percentage of patients with improved clinical symptoms, and adverse event (AE) rates. Assessments of the virological measure (plasma viral load), the immunological measure (CD4 + T lymphocyte count), and the percentage of patients with improved clinical symptoms were performed according to the criteria described by the Joint United Nations Program on HIV/AIDS (UNAIDS) and World Health Organization (WHO).

Exclusion criteria

Studies were excluded if they were: (a) animal experiments; (b) clinical trials from which no relevant data could be extracted; (c) studies that were repeatedly published; (d) patients with serious mental disorders or dementia; (e) patients with serious systemic symptoms that may significantly affect their ability to perform daily living activities, including syncope or coma, seizure-like headache, and cachexia; (f) women who were pregnant or breastfeeding.

Search strategy

The search strategy was developed using the Cochrane Handbook for Systematic Reviews of Interventions. To identify relevant RCTs published in English or Chinese as of May 2012, we performed a computerized search in PubMed (1979-May 2012), The Cochrane Library (1989-May 2012), China National Knowledge Infrastructure (CNKI) (1979-May 2012), and Wanfang Data (1979-May 2012), and a manual search in Chinese Journal of AIDS & STD, Chinese Journal of Clinical Infectious Diseases, Chinese Archives of Traditional Chinese Medicine, Chinese Journal of Integrated Traditional and Western Medicine, and Chinese Journal of Basic Medicine in Traditional Chinese Medicine. References in the reports identified were also searched. In addition, we requested gray literature from relevant manufacturers. For the English-language search in Pubmed and The Cochrane Library, subject headings and text-word searches were used, and the search terms in-
cluded "Traditional Chinese Medicine", "TCM", "Acquired Immunodeficiency Syndrome," "AIDS", "HIV", "Randomized Controlled Trial", "RCT" and their synonyms. For the Chinese-language search in CNKI and Wanfang Data, we used the same search strategy and search terms (in this case, Chinese equivalents of the aforementioned English words were used). Details on the search strategy are provided in the Appendix.

**Literature screening and data extraction**

The title and abstract of the identified reports were reviewed independently by two reviewers to exclude duplicated and non-RCT reports. Then, the full texts of the remaining reports were examined for eligibility for final inclusion according to the specified inclusion criteria. Data extraction was conducted independently by two reviewers using a predesigned extraction form. Data to be extracted included general information, interventions, and outcome measures. Discrepancies were resolved by discussion or referral to a third reviewer. If a study was potentially eligible for inclusion but lacked sufficient data, the authors of the study were contacted for additional information.

**Assessment of methodological quality and evidence quality**

Methodological quality of the included RCTs was assessed by the domains (randomization, allocation concealment, blinding, complete outcome data, selective outcome reporting, and other potential biases) described by Higgins et al. in the Cochrane Handbook for Systematic Reviews of Interventions (Version 5.1.4). Evidence quality was rated as high, moderate, low, or very low using the GRADE 3.6 software.

**Statistical analysis**

Meta-analysis was performed using the RevMan software (version 5.1.4, RevMan software, London, England) from The Cochrane Collaboration. First, we performed clinical heterogeneity and methodological heterogeneity analyses for all the studies included. Statistical heterogeneity was evaluated by the Chi-squared ($\chi^2$) test and heterogeneity was considered present if $P\leq0.10$. Quantitative assessment of heterogeneity was performed using $I^2$ where $I^2>50\%$ indicated high heterogeneity among study results. Study results were pooled for analysis using a fixed effects model when there was no statistical heterogeneity or using a random effects model when statistical heterogeneity was detected. For dichotomous variables, odds ratio (OR) and 95% confidence interval (CI) was determined. For hypothesis testing, the U test was used and the results were presented as $Z$ and $P$ values. The differences in the efficacy between interventions were considered statistically significant if $P<0.05$. The results of hypothesis testing are presented in a forest plot.

**RESULTS**

**Results of literature search and characteristics of the included trials**

Nine hundred and thirty one reports were identified initially, including 178 from PubMed, seven from the Cochrane Library, 270 from CNKI and 476 from Wanfang Data. By reading the title and abstract of the identified reports, we excluded 919 reports that were non-RCTs, repeatedly published, or irrelevant to this systematic review. The full texts of the remaining 18 articles were examined and 6 of the 18 articles were excluded because of failure to meet the criteria for inclusion in our systematic review. Therefore, 12 RCTs (2 published in English and 10 in Chinese) were finally included. The 12 RCTs involved a total of 881 patients with AIDS, with 495 patients in the experimental group and 386 in the control group. Figure 1 is the flowchart of study inclusion and exclusion. The characteristics of the included study are shown in Table 1.
**Results of methodological quality assessment**

Assessment of methodological quality of the included RCTs was performed using the risk of bias assessment tool provided in the Cochrane Handbook (Table 2). Of the 12 RCTs assessed, 2 were classified as high quality, 2 as moderate quality, and 8 as low quality.

**Results of statistical analysis**

Reductions in plasma viral load: Reductions in plasma viral load were reported by three studies.\(^9,15,17\) Subgroup analyses were performed by control interventions (i.e., placebo or conventional Western medical therapy). For two studies,\(^9,15\) using placebo as control, a fixed-effects model was used for pooled analysis owing to absence of statistical heterogeneity among the studies (\(P=0.19, I^2=42\%\)). Meta-analysis showed that TCM therapy was significantly more effective in reducing plasma viral load than placebo in the treatment of AIDS [\(OR=2.46, 95\% CI (1.02, 5.94); P=0.04\)]. In a study\(^17\) comparing integrated traditional Chinese and Western medical therapy with Western medical therapy alone in patients with AIDS, Western medical...
### Table 2: Assessment of methodological quality of the included studies

<table>
<thead>
<tr>
<th>Included study</th>
<th>Randomization</th>
<th>Allocation concealment</th>
<th>Blinding</th>
<th>Incomplete outcome data</th>
<th>Selective outcome reporting</th>
<th>Other sources of bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liu CE et al 2006⁶</td>
<td>Unclear</td>
<td>High risk</td>
<td>High risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Jiang QS et al 2009⁴</td>
<td>Unclear</td>
<td>High risk</td>
<td>Low risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Li M et al 2006⁷</td>
<td>Low risk</td>
<td>High risk</td>
<td>Unclear</td>
<td>High risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Yang GH et al 2008¹⁴</td>
<td>Unclear</td>
<td>High risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Unclear</td>
<td></td>
</tr>
<tr>
<td>Chen M et al 2008¹¹</td>
<td>Unclear</td>
<td>High risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Unclear</td>
<td></td>
</tr>
<tr>
<td>Jiang F et al 2009⁹</td>
<td>Unclear</td>
<td>Low risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Tian M et al 2011¹³</td>
<td>Low risk</td>
<td>Low risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Burack JH et al 1996²⁴</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
<td></td>
</tr>
<tr>
<td>Wang J et al 2006¹⁵</td>
<td>Low risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Shi D et al 2003¹⁶</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Zhao HX et al 2006¹²</td>
<td>Unclear</td>
<td>High risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
<tr>
<td>Liu HY et al 2007¹⁸</td>
<td>Low risk</td>
<td>High risk</td>
<td>High risk</td>
<td>Low risk</td>
<td>Low risk</td>
<td>Unclear</td>
</tr>
</tbody>
</table>

### Figure 2: Meta-analysis on reductions in plasma viral load by TCM therapy in patients with AIDS


### Figure 3: Meta-analysis on increases in CD4+ T lymphocyte count by TCM therapy in patients with AIDS

therapy alone was found to be associated with significantly reduced plasma viral load \([OR=0.16, 95\% CI (0.05, 0.55); P=0.004]\) (Figure 2).

Increases in CD4 + T lymphocyte count: Increases in CD4 + T lymphocyte count were described in four studies, comparing TCM therapy with placebo in AIDS. A fixed-effects model was used for pooled analysis because there was no statistical heterogeneity among the studies \((P=0.69, I^2=0\%\) ). Meta-analysis showed that TCM therapy was associated with a significantly higher CD4+ T lymphocyte count compared with placebo in the treatment of AIDS (Figure 3).

Percentage of patients with improved clinical symptoms: Percentage of patients with improved clinical symptoms was reported in seven studies comparing TCM therapy with conventional Western medical therapy in AIDS. A fixed-effects model was used for pooled analysis because there was no statistical heterogeneity among the studies \((P=0.27, I^2=21\%\) ). Meta-analysis showed that patients with AIDS who received TCM therapy were significantly more likely to have improved clinical symptoms compared with those on conventional Western medical therapy \([OR=2.82, 95\% CI (1.85, 4.31); P<0.000 01]\) (Figure 4).

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Events</th>
<th>Total</th>
<th>Control</th>
<th>Total</th>
<th>Weight</th>
<th>Odds Ratio</th>
<th>M.H., Fixed, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen 2008</td>
<td>36</td>
<td>40</td>
<td>26</td>
<td>40</td>
<td>9.9%</td>
<td>4.85 [1.43, 16.42]</td>
<td></td>
</tr>
<tr>
<td>Jiang 2009</td>
<td>54</td>
<td>57</td>
<td>48</td>
<td>58</td>
<td>9.8%</td>
<td>3.75 [0.97, 14.43]</td>
<td></td>
</tr>
<tr>
<td>Jiang F 2009</td>
<td>36</td>
<td>40</td>
<td>29</td>
<td>40</td>
<td>11.1%</td>
<td>3.41 [0.98, 11.83]</td>
<td></td>
</tr>
<tr>
<td>Liu 2006</td>
<td>51</td>
<td>58</td>
<td>15</td>
<td>21</td>
<td>10.2%</td>
<td>2.91 [0.85, 10.00]</td>
<td></td>
</tr>
<tr>
<td>Liu 2007</td>
<td>31</td>
<td>35</td>
<td>10</td>
<td>20</td>
<td>5.6%</td>
<td>7.75 [1.99, 30.23]</td>
<td></td>
</tr>
<tr>
<td>Tian 2011</td>
<td>47</td>
<td>94</td>
<td>15</td>
<td>46</td>
<td>38.5%</td>
<td>2.07 [0.99, 4.32]</td>
<td></td>
</tr>
<tr>
<td>Yang 2008</td>
<td>42</td>
<td>47</td>
<td>32</td>
<td>34</td>
<td>15.1%</td>
<td>0.53 [0.10, 2.69]</td>
<td></td>
</tr>
</tbody>
</table>

Total (95% CI) 371 259 100.0% 2.82 [1.85, 4.31]

Figure 4 Meta-analysis on the potential to improve clinical symptoms by TCM therapy in patients with AIDS

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Events</th>
<th>Total</th>
<th>Control</th>
<th>Total</th>
<th>Weight</th>
<th>Odds Ratio</th>
<th>M.H., Fixed, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tian 2011</td>
<td>4</td>
<td>94</td>
<td>1</td>
<td>46</td>
<td>29.7%</td>
<td>2.00 [0.22, 18.42]</td>
<td></td>
</tr>
<tr>
<td>Wang 2006</td>
<td>6</td>
<td>30</td>
<td>4</td>
<td>33</td>
<td>70.3%</td>
<td>1.81 [0.48, 7.18]</td>
<td></td>
</tr>
</tbody>
</table>

Total (95% CI) 124 79 100.0% 1.87 [0.58, 6.01]

Figure 5 Meta-analysis on the rates of AEs associated with TCM in patients with AIDS

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Follow-up (weeks)</th>
<th>Item</th>
<th>Assumed risk (oral Traditional Chinese Medicine)</th>
<th>Corresponding risk (placebo or western medical)</th>
<th>OR (95% CI)</th>
<th>No. of participants (studies)</th>
<th>Quality of the evidence (GRADE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reductions in plasma viral load (HIV-IRNA)</td>
<td>13-24</td>
<td>Study population</td>
<td>Moderate</td>
<td>27 per 100</td>
<td>26 per 100</td>
<td>0.95 [0.5, 1.81]</td>
<td>194</td>
</tr>
<tr>
<td>Increases in CD4+ T lymphocyte count</td>
<td>12-30</td>
<td>Study population</td>
<td>Moderate</td>
<td>23 per 100</td>
<td>22 per 100</td>
<td>2.54 [1.40, 4.60]</td>
<td>202</td>
</tr>
<tr>
<td>Percentage of patients with improved clinical symptoms</td>
<td>2-48</td>
<td>Study population</td>
<td>Moderate</td>
<td>30 per 100</td>
<td>52 per 100</td>
<td>3.1 per 100</td>
<td>202</td>
</tr>
<tr>
<td>Rates of drug-related adverse events</td>
<td>2-26</td>
<td>Study population</td>
<td>Moderate</td>
<td>68 per 100</td>
<td>85 per 100</td>
<td>2.82 [1.57, 5.43]</td>
<td>630</td>
</tr>
</tbody>
</table>

Table 3 Assessment of evidence quality by the GRADE criteria
was generally graded as moderate.

The quality of evidence of the included RCTs was very low quality: we are very uncertain about the estimate of effect and may change the confidence in the estimate of effect; moderate quality: further research is very unlikely to change our confidence into the following four grades: high quality: further research is very unlikely to change our confidence in the estimate of effect; moderate quality: further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate; low quality: further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate; very low quality: we are very uncertain about the estimate. The quality of evidence of the included RCTs was generally graded as moderate.

**DISCUSSION**

In this study, we performed a search to identify clinical trials investigating the efficacy and safety of TCM interventions for the treatment of AIDS in China and elsewhere before May 2012. Meta-analysis found that TCM interventions were significantly more effective than placebo in reducing plasma viral load and increasing CD4+ T lymphocyte count in patients with AIDS. When compared with conventional Western medical therapy, TCM interventions were significantly less effective in reducing plasma viral load, although they were associated with a higher percentage of patients with improved symptoms. Patients receiving TCM interventions did not seem to be at an increased risk of AEs.

**Integrity and practicality of the evidence**

Although all the 12 studies included in this systematic review claimed to be randomized controlled trials, only six described specific randomization methods, while the remaining six provided no such description. Four RCTs reported and used appropriate allocation concealment whereas the other eight did not mention or specify allocation concealment and therefore were considered as having a moderate to high risk of selection bias. Four RCTs employed blinding. In contrast, seven did not use blinding or did not offer clear information about blinding and one provided no such description. These eight were therefore at a moderate to high risk of measurement bias. Four RCTs reported the number of patients who were lost to follow-up, dropout, or excluded from the studies, and used intention-to-treat (ITT) analysis. The remaining eight RCTs provided no such data, resulting in a moderate to high risk of data completeness bias. None of the 12 RCTs selectively reported outcomes and therefore there was a low risk of reporting bias. The problems in the design of the included trials may have limited the reliability of their conclusions, thus reducing the strength of the conclusion of this meta-analysis, warranting the need for high-quality clinical studies with a low risk of bias.

**Assessment of evidence quality**

Table 3 shows the quality of the included RCTs’ evidence assessed by an approach developed by the GRADE system (version 3.6, GRADE, London, England). The GRADE system classifies the quality of evidence into the following four grades: high quality: further research is very unlikely to change our confidence in the estimate of effect; moderate quality: further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate; low quality: further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate; very low quality: we are very uncertain about the estimate. The quality of evidence of the included RCTs was generally graded as moderate.

**Evidence quality**

There are five factors that may contribute to a decrease in evidence quality, including limitation in study design, inconsistency of results, indirectness of evidence, imprecision of results, and publication bias. The studies included in our systematic review had consistent and precise results, with no indirectness of evidence. However, there were certain limitations in study design and implementation and a risk of bias, resulting in possible exaggeration of the results. Therefore, the quality of evidence was generally rated as moderate by the GRADE criteria and the risk of bias was moderate.

**Limitations**

The RCTs included in our systematic review had a moderate quality of evidence and a high risk of selection bias, implementation bias and measurement bias. In addition, our systematic review did not include unpublished studies. Furthermore, the included RCTs differed in terms of treatment duration, disease severity, time points at which outcome measures were assessed, and methods used for outcome assessment. Finally, there was a risk of bias in language distribution of the included RCTs because our search was restricted to RCTs published in English or Chinese. All these factors described above may have limited the strength of the conclusion of our systematic review.

**Efficacy and safety analyses**

Our review showed that TCM interventions were associated with a significantly higher percentage of patients with improved clinical symptoms compared with conventional Western therapy. This finding was consistent with the conclusions by Yan et al. In addition, TCM interventions were significantly more effective than placebo in reducing plasma viral load and increasing CD4+ T lymphocyte count. TCM interventions were not more effective than conventional Western therapy in reducing plasma viral load. Regarding incidences of AEs, TCM was comparable to conventional Western therapy. These results suggest that TCM may be an effective and safe therapeutic option for the long-term treatment of AIDS.

**Significance for clinical practice and implications for the future**

In this report, we systematically reviewed the efficacy and safety of TCM interventions versus conventional...
Western medical treatment or placebo in patients with AIDS. We found that TCM interventions were significantly more effective in increasing CD4+ T lymphocyte count and the percentage of patients with improved clinical symptoms, although their ability to reduce viral plasma load was less remarkable. Currently, the treatment of AIDS with TCM or TCM plus Western medicine focuses more on improving symptoms, quality of life and survival, and less on reducing plasma viral load and increasing CD4+ T lymphocyte count. Our finding suggests that patients with AIDS who have significant clinical symptoms, significantly lower immunity, or poor quality of life may benefit more from TCM interventions and that TCM interventions may be safely used for the long term treatment of AIDS. The included 12 RCTs provided no direct evidence linking TCM with reduced mortality in patients with AIDS and associated disorders. The effectiveness of TCM interventions in reducing long term mortality in AIDS needs to be further investigated with larger multi-center RCTs. Further clinical trials should focus on the standardization of TCM-based pattern differentiation and efficacy evaluation systems and should follow patients long enough to collect more data on AEs and losses to follow-up to reduce heterogeneity among studies and increase methodological quality of the studies.

In conclusion, future RCTs should use appropriate randomization, allocation concealment, and blinding, and perform ITT analysis with complete data to improve trial quality. Attention should be paid to clinical reports with negative findings. It is recommended to conduct standardized RCTs in compliance with the IC-MJE clinical trial registration policy22 and the Consolidated Standards of Reporting Trials statement 23 to provide stronger evidence for the use of TCM for AIDS in clinical practice.

REFERENCES


