

P5.011

The spectrum-effect relationship—a rational approach for screening effective compounds from Chinese herbal medicine



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Purpose: Introduce a rational method for reflecting the Chinese herbal medicine effective compositions and internal quality—the spectrum-effect relationship theory, so as to provide ideas and references about screening the Chinese herbal medicine effective components, distinguish different herbal species and truly reflect the inner quality of Chinese herbal medicine.

Methods: We systematically review the application of the spectrum-effect relationship theory in the research of Chinese herbal medicine, including research mentality, different chromatographic analysis techniques, data processing technologies and structure determination.

Results: It is proved that, with the help of the spectrum-effect relationship, the authentication and identification of the Chinese herbal medicine can be accurately conducted even if the concentration of effective components are not very similar in different samples.

Conclusion: The spectrum-effect relationship is considered as a potential method to determine active ingredients in complex mixtures and reflect the internal quality of Chinese herbal medicine.

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P5.012

Systemic Review with meta-analysis on Complementary and Alternative Medicine Treatments in hepatitis



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Purpose: We performed a systematic review with meta-analysis for Complementary and Alternative Medicine (CAM) as defined by the Cochrane Collaboration in hepatitis B and C.

Methods: A computerized search of databases (Cochrane Library, Medline, PsychINFO, and Scopus) through June 2013 was performed. We screened the reference sections of original studies and systematic reviews in English language for CAM in hepatitis B and C. Randomized controlled trials (RCT) comparing treatment to controls were assessed by the Cochrane risk of bias tool. Where possible, meta-analyses were performed using odds ratios (OR) with 95% confidence intervals (CI).

Results: A total of 59 RCT were found, 12 in hepatitis B, 46 in hepatitis C and one in both. 23 studies could be included in a meta-analysis. The risk of bias was heterogeneous in the included studies. In hepatitis B meta-analysis was performed for cyanidanol vs placebo. No effect on the biochemical markers ($p=0.55$) but a significant effect on viral response (2 studies; $n=310$; $OR = 5.04$; $95\%CI 1.76-14.44$; $p=0.003$) could be shown. In hepatitis C meta-analysis showed a significant effect on biochemical markers in vitamin D vs placebo (2 studies; $n=122$; $OR = 7.94$; $95\%CI 2.86-22.03$; $p<0.0001$) and on biochemical markers (5 studies; $n=347$; $OR=1.87$; $95\%CI 1.20-2.90$; $p=0.0005$) as well as viral response (6 studies; $n=380$; $OR=2.09$; $95\%CI 1.34-3.27$; $p=0.001$) in phlebotomie. No significant effect could be shown for vitamin C and E (2 studies; $n=61$), omega-3-fatty acid (2 studies; $n=62$), silymarin (2 studies, $n=293$), zinc (5 studies, $n=256$) or CH-100 (2 studies; $n=131$).

Conclusion: The average methodological quality of the identified studies was heterogeneous. Best evidence was found for cyanidanol in the treatment hepatitis B and vitamin D and phlebotomie in the treatment of hepatitis C.

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Chinese herbal medicine for multidrug-resistant tuberculosis (MDR-TB): a systematic review of randomised clinical trials



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Purpose: Chinese herbal medicine (CHM) has been increasingly used as an adjuvant treatment for multi-drug resistant tuberculosis (MDR-TB) in China. To inform clinical practice, we performed a systematic review on the beneficial effect and safety of CHM for MDR-TB.

Methods: We systematically searched the six electronic databases for randomised clinical trials (RCTs) of CHM plus chemotherapy for MDR-TB. RevMan 5.2 software was used for data analyses with effect estimates presented as risk ratio (RR) with 95% confidence interval (CI).

Results: 28 RCTs involving 3085 participants with MDR-TB were included. The methodological quality was generally poor in terms of risk of bias. Meta-analyses favoured CHM plus chemotherapy on sputum bacteriological conversion rate compared with chemotherapy alone after initiation of treatment (6th mos: $RR 1.29$, $95\% CI 1.14$ to 1.46 , $n=11$; 12th mos: $RR 1.38$, $95\% CI 1.19$ to 1.59 , $n=5$; 18th mos: $RR 1.19$, $95\% CI 1.11$ to 1.28 , $n=7$). Compared with chemotherapy alone, meta-analysis showed benefit from CHM plus chemotherapy on lung